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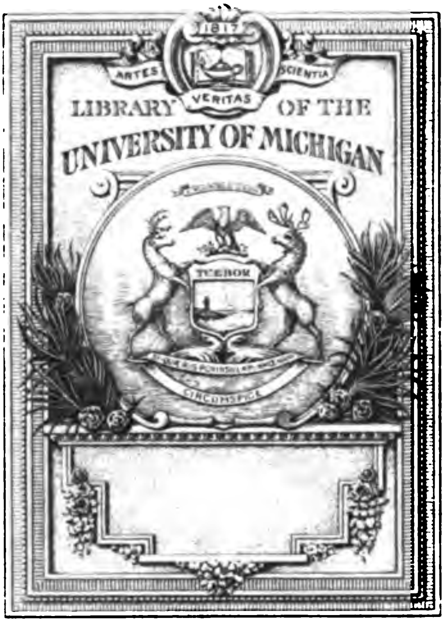
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OF THE

SENATE

OF THE

STATE OF NEW-YORK,

SEVENTY-THIRD SESSION.

1850.

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No. 76.

IN SENATE, MARCH 6, 1850.

◆

REPORT

Of the committee on claims on the bill in relation to the Syracuse Coarse Salt company.

Mr. Schoonmaker, from the committee on claims, to which was recommitted the bill entitled "An act to pay the Syracuse Coarse Salt Company for land taken to abate a nuisance," together with the petition of said company and accompanying papers,

REPORTS:

That the committee have had the same under consideration, and find that in January, 1849, application was made to the Legislature of this State, in behalf of the mayor and common council of the city of Syracuse, for the purpose of abating a nuisance arising, as was alleged, under the following circumstances: In lowering a dam across the Onondaga creek, to abate the nuisance of a pond of water, a portion of low land belonging to the State contiguous to the salt springs had been laid bare, together with lands belonging to other owners. It was feared that the return of warm weather would cause an exhalation of nuisance from such low land, which would be fraught with great danger to the health of the citizens of Syracuse, particularly in case of the anticipated invasion by Asiatic cholera.

It was supposed that the only feasible and effectual way of abating the nuisance was to cover such low land with earth to the depth of two or three feet. To do this it was proposed to take the earth requisite to cover such lands from a bluff or peninsula belonging to the State, which was partially covered with the salt vats of the Syracuse Coarse Salt Company, and was held by said company under a lease from the State.

Such application was referred by the Senate to its committee on canals, and a majority of that committee on the 18th day of January, 1849, (see Senate Documents of 1849, No. 11,) reported upon such application, and recommended the passage of the bill referred to them to authorize the abatement of such nuisance. The committee in their report set forth particularly the facts in the case, and as usual in similar cases, estimate with much particularity the great pecuniary advantage the State is to derive from the proposed expenditure. And they report that the damages of the Syracuse Coarse Salt Company *may* amount to three thousand dollars, and recommend an appropriation of a sum not exceeding that amount for their payment.

On the 25th day of January, 1849, in pursuance of the recommendations contained in such report, the Legislature passed an act entitled "An act to authorize the abatement of a nuisance on lands owned by the people of the State of New-York, and other lands in the city of Syracuse," (see Session Laws of 1849, page 13.) By the 4th section of such act, the common council of the city of Syracuse were authorized to proceed and reclaim such land belonging to the State, and for the expenses thereof they were to draw upon the State Treasury for a sum not exceeding $4,000. By the 5th section of such act, it is provided that in case it should be necessary to *remove* any salt vats, or other fixtures owned by the Syracuse Coarse Salt Company, on farm lot 252, in order to reclaim said lands, said common council should be authorized to *remove* so many of the salt vats and other fixtures as might be necessary for that purpose. The section then proceeds and makes provision for the appointment of commissioners to assess the damages occasioned by the *removal* or *destruction* of such vats or other fixtures, and appropriates a sum not exceeding $3,000 to pay such damages. By the 8th section of such act, the Coarse Salt Company were authorized to locate and use an equal quantity of land with that covered by the vats removed on any lands belonging to the State, and set apart for the manufacture of salt.

From these sections it is evident that the only power the Legislature intended to or did confer upon the common council of Syracuse was "*to remove*," the vats of the company, and nothing more, and the damages to be assessed were to be for such *removal*, and the destruction of such as was necessarily occasioned in the removal. The State evidently from the said 8th section, contemplated a removal to some other land to be selected by the company, belonging to the State.

The common council of Syracuse, or the agent selected by them to discharge the powers conferred by the State under such act, instead of proceeding in the removal of the vats, and thus doing what the law authorized, and what the Legislature evidently contemplated they should do, put such vats up and sold them at public auction, with the condition that the purchaser should remove them off the land in 24 hours. Upon such, to say the least of it, extraordinary terms, and accompanied with *such* conditions, the vats, as might have been anticipated, sold for a mere pittance, a few shillings per vat. The larger portion of the vats were bought in by or in behalf of some of the individuals interested in the Coarse Salt Company, and are now being or have been put up on lands belonging to them or some of them individually. It may not be improper here to remark, that the condition of immediate removal of the vats, though made and announced before, was not enforced after the sale.

The commissioners appointed under the act were then called upon to appraise the damages of the Syracuse Coarse Salt Company, as required by the act. The individual acting for the common council of Syracuse having sold the vats, the only course left for the commissioners was to appraise the vats at their full value. And accordingly they awarded and assessed "the damages occasioned by the *removal* and *destruction* of the salt vats and fixtures, at the sum of four thousand two hundred and eighty-seven dollars," thus exceeding by $1,287 the appropriation made by the act. The Coarse Salt Company have been paid by the Comptroller the amount appropriated, which leaves a balance of $1,287 still unpaid on such award, and it is for such balance that the Coarse Salt Company now ask payment from the State with interest.

Your committee have been shown, in behalf of the Coarse Salt Company, a statement of the actual expenses incurred by said company in the removal and auction of some of their vats, including costs of new lumber and expenses of streets, by which it appears that such expenses amounted to $19 per vat. Multiplying this sum by the whole number of vats, 171, it makes the gross sum of $3,249, which is less than the amount of appraisal by over $1,000. This committee are therefore of opinion that if the agents of the common council of Syracuse had confined themselves within the terms of the act, the damages to be appraised, would have exceeded the appropriation by a very small amount if any, and the Legislature would have been saved the necessity of acting on the bill under consideration. The bill under consideration having been recommitted to your committee, they have deemed it to be their duty to inform the Senate of the above facts, which have come to their knowledge in the course of their investigations And in doing so your committee cannot refrain from expressing their opinion that the agents of the common council of Syracuse, in the sale of such vats, acted without sanction or authority of law, and usurped powers not conferred or intended to be conferred upon them by the Legislature, and have thereby unnecessarily increased the costs and expenses of the State. A power to remove did not and could not include the power to sell, and had not the Coarse Salt Company, or their agents, actually or impliedly assented to or acquiesced in such sale, a question might well have arisen whether any right or title whatever passed by such sale to the purchaser.

The committee, in relation to so much of the bill under consideration as directs the payment of interest, reccommend it to be stricken out, in conformity with the rule which has been adopted in other cases. With these remarks they return the bill for the consideration of the Senate.

M. SCHOONMAKER,
THO'S CROOK,
S. H. JOHNSON.

State of New-York.

No. 77.

IN SENATE, MARCH 6, 1850.

◆

REPORT

Of a majority of the committee on claims on the petition of James Brady and Patrick Fitzsimmons for compensaton for extra work on a canal contract.

Mr. Schoonmaker, from a majority of the committee on claims, to which was referred the petition of James Brady and Patrick Fitzsimmons, praying for an allowance for extra labor and expense in constructing section No. 6 of the enlargement of the Erie canal,

REPORTS:

That it appears that the petitioners, in 1838, entered into a contract with the Canal Commissioners for the construction of section No. 6 of the Erie canal, through the village of West Troy. Under the contract, it was stipulated that the water should be drawn off from the canal immediately on the close of navigation, which was on the 25th day of November of that year. The Commissioners, instead of fulfilling their contract, retained the water in the canal until the 27th day of January, 1839; and the petitioners were thereby put to a large amount of extra expense in the removal of ice out of the canal, which at the closing of the canal was only about two inches thick, but which, when the petitioners were enabled to work at it, after drawing off the water, was on an average 20 inches thick.

This is alleged to have occasioned a large amount of additional labor and expense to the petitioners.

They also claim that by such delay in letting off the water they were prevented from availing themselves of the abundance of workmen unemployed at the time when they were to have been permitted to commence; and that they had on hand, at great expense, teamsters and teams, and a foreman at an annual salary.

They also allege that they performed extra work in digging a ditch and building drains, to enable them to work.

The petitioners then state: "Therefore your petitioners humbly solicit your consideration, inasmuch as the fact is and was that no other contractors on any of the adjacent sections were compelled to such unnecessary expenditure as is represented, *in constructing dams*, *digging a ditch*, and *removing ice*, which they have never been compensated for; and also for the loss they sustained, as represented from the fact of the water being retained on the level longer than a stipulated time."

It appears that this claim was presented to the Senate in 1842, and from Senate Document No. 86, of that year, it appears that already at that time, for digging the ditch and building the dams, part of the work for which they ask compensation in their petition, they had been paid and satisfied. Such fact, in the opinion of your committee, renders this claim somewhat suspicious.

The petitioners obtained no relief at that session of the Legislature, and the claim has slept until now, a period of nearly eight years, when it is brought by the petitioners to the attention of the Senate.

The Legislature have already provided and furnished the Canal Board with ample powers to make such extra allowance and compensation to contractors upon the canals, as may be reasonable, for extra expenses and labor in the performance of their contracts, (see 1 R. S, 3d ed., p. 261, sections 107, 108, &c.,) provided such application is made within one year after the performance of the work.

No excuse or reason is given by the petitioners, why their claim was not presented to and settled with the State officers vested with full and ample power, at the time they settled their contract. The committee suppose that then was the proper and the only time for such claim to be presented. That the statute requiring such claims to be presented within one year, was enacted for wise and proper purposes; and that the whole benefit of the statute will be lost, and its salutary provisions rendered not only useless but positively injurious, unless the Legislature hold the public creditors to a compliance with its provisions. A creditor of the State having a just claim, unless some very peculiar reasons operate to prevent, would naturally present it for settlement and adjustment at the earliest period, and would court the investigation of those public officers who were cognizant of the matter, and could pass upon it understandingly. While on the other hand, one seeking to enforce an unjust claim would shrink from such an investigation, and desire to have time stretch its oblivious wings over the transaction; and then, when years have rolled on, and the officers of the State have changed, and none who knew are left to speak in behalf of the government, take the chance to press it through upon the sympathy and kindly feelings of the Legislature.

Your committee believe that the Legislature should either hold the public creditors to a compliance with the statute, or repeal it entirely. They should not permit a law to remain on the statute book, the justice of which they practically deny.

Your committee are aware and admit, that there may be cases which should, by reason of some disability operating, be exceptions; but such reasons should be strong and well established, and the exception should be placed expressly on such ground.

The case under consideration, as your committee have shown, comes before them under suspicious circumstances, ten years after the performance of the alleged extra work, and no sufficient reason offered why it has rested thus. They therefore think there is nothing to relieve the petitioners from the application of the statute, even if they had satisfied the committee of the original justice of their claim, which they have failed to do.

A majority of your committee have, therefore, come to a conclusion unfavorable to the prayer of the petitioners, and submit, for the consideration and adoption of the Senate, the following resolution:

Resolved, That the prayer of the petitioners ought not to be granted.

M. SCHOONMAKER,
THOS. CROOK.

State of New-York.

No. 78.

IN SENATE, MARCH 9, 1850.

REPORT

Of the committee on claims on a bill in relation to settlement of damages for the diversion of the waters of the Black river.

Mr. Schoonmaker, from the committee on claims, to which was referred a bill entitled "An act to facilitate the settlement of claims for damages by reason of the diversion of the water of the Black river for the use of the Black river and Erie canals,

REPORTS:

That the committee have had the same under consideration, and find that full and ample provision is already made by law for the estimate, appraisal and payment of damages occasioned by the appropriation of waters and streams to the public use, (1 R. S., 3d ed., p. 254, sec. 54, &c)

In addition to the above, there is no evidence before the committee that any claim for damages for any such alleged diversion exists in favor of any individual against the State. The committee therefore recommend that such bill should not become a law.

State of New-York.

No. 79.

IN SENATE, MARCH 9, 1850.

REPORT

Of the majority (Senators Babcock and Mann,) and minority (Senator Schoonmaker,) of the committee on the judiciary, on the engrossed bill from the Assembly entitled "An act to incorporate the United States Mail Steamship Company."

The undersigned, a majority of the judiciary committee, (Mr. Schoonmaker dissenting,) to which was referred the engrossed bill from the Assembly, to incorporate the United States Mail Steamship Company, to report whether the Legislature can create corporations of this nature, by special act, in conformity with the constitution, submit the following

REPORT:

The first section of the bill referred to them, proposes to incorporate George Law, Marshall O. Roberts, and their associates, by the name of the United States Mail Steamship Company, for the period of twenty years, for the purpose of building, equipping, furnishing, fitting, purchasing, chartering and owning vessels, or any share or interest therein, legal or equitable, to be propelled solely or partially by the power or aid of steam, or other expansive fluid, or motive power, and to be run and propelled in navigating to and from the city of New-York and the city of New Orleans, and in the waters of the Gulf of Mexico, to touch at any intermediate port or place between said cities or in said waters, and *to run between such other ports* *and places as the directors of said corporation, or the government of the United States may direct*; and for such purpose it is declared, that all the necessary and incidental power is granted to said corporation for carrying freight and passengers, for transporting the mail, and for all other business of the company.

The second section of the bill fixes the capitol stock of the company at one million of dollars, with liberty to increase it to two millions, and confers power on the company to borrow half a million of dollars, when one million of dollars stock shall have been subscribed and paid in, and authorizes the company to commence operations when half a million of dollars shall have been subscribed and five per cent paid in thereon.

Sections three to eight inclusive, provide for the mode of procuring subscriptions to the stock, the number of directors, the manner of their election, and the mode in which the business and affairs of the company are to be managed and conducted. The ninth section provides, that the stockholders shall be liable for all the debts that shall be due to its laborers and workmen, and imposes no other personal liability. The remaining section provides that a book, to be open to the inspection of creditors and stockholders, shall be kept by the company containing the names and residence of the shareholders.

It will be seen from this condensed statement of the provisions of the bill, that it proposes to create a corporation, for the purpose of owning and running vessels propelled by steam or other motive power, to any ports or places the company may direct; or in other words, it is to be a corporation with power to build, purchase and own any description of vessels or ships, and to run them to any part of the world the directors may choose; and the powers granted are broad enough to allow the company to establish and run a line of steamboats from New-York to Albany, or between any other ports or places in the United States. The powers proposed to be conferred are of so general and unrestricted a character, that the corporation, if created, would be practically without any restrictions, in the accomplishment of its general object, except the limitation of its capital to two millions of dollars; and it would possess the franchises or privileges of having a corporate name, a common seal, succession, transferable stock, power to make bye-laws, and exemption from personal liability for the debts the company may contract in the prosecution of its business, except to its workmen and laborers.

The first section of the eighth article of the constitution declares that "corporations may be formed under general laws, *but shall not be created by special act*, except for municipal purposes, and in cases where, in the judgment of the Legislature, the objects of the corporation cannot be attained under general laws."

This provision of the constitution was, in the opinion of the committee, designed to establish a new system in respect to the creation of corporations.

It was not intended to prevent or restrict the formation of corporations, but wholly to divest them of the character of monopolies or grants of special privileges, which, under the former system, had been the occasion of numerous complaints, and the source of many abuses.

Under the old system of special acts, and which the present constitution was intended to abrogate, special privileges and immunities were granted to particular individuals, which were refused to others, contrary to the great principles of equality and justice, on which our entire system of government is, or ought to be established. Those who were fortunate enough by their position, or influence with the Legislature, to obtain the granting of a charter under which to carry on business for the purposes of gain, were exempted from those hazards of loss and ruin to which less favored individuals were exposed, who carried on the same kind of business, not as corporators, but individually, or as copartners. It was also found that this system of creating corporations by special acts, had become productive of great evils to the government itself. The combinations produced by it, at times influenced or wholly controlled the action of both branches of the Legislature. These evils, which experience had shown to be inseparably connected with a system of special grants, were intended to be remedied by taking from the Legislature the power of conferring on any class of individuals, powers and privileges in transacting business, or in the use and employment of capital, which were not equally enjoyed by all.

It is not for the committee or the Legislature, at this time, to inquire whether the provisions of the constitution in respect to the creation of corporations are wise, or are better adapted to remedy the evils existing under the former constitution than some other mode
h might have been devised. We are only authorized to inquire
ertain what the constitution enjoins or prohibits; and when

that is ascertained, we are under the highest obligations that can be imposed, to regard and obey, in our legislative action, the limitations and restrictions imposed by it on the exercise of legislative powers.

It was doubtless foreseen, or at least feared, by those who framed the constitutional provisions under consideration, that cases might possibly arise in which the proper and beneficial objects to be attained in creating a corporation, could not be attained except by the passage of a special act; and therefore it was that the power to create corporations by special act, was not wholly taken from the Legislature. But before they can thus create a corporation, the Legislature must determine that, in their judgment, the legitimate and proper objects to be attained in the creation of a special corporation cannot be attained, in case such corporation should be created under a general law. The judgment which the Legislature is to form in such case should not be founded on mere caprice, but it should be an enlightened, intelligent, rational judgment, founded on a careful and full consideration of the whole subject.

It may not be easy for the Legislature to determine in what particular cases, or class of cases, they possess the power to create corporations by special act. The general rule is, that all corporations should be created under general laws. Those created by special acts are exceptions to the general rule, and it is much easier to determine the general rule than the exceptions to it.

There are classes of cases in which there seems to have been no doubt as to the obligation, as well as the propriety of passing general laws, under which corporations were to be formed.

We have now on our statute books general laws for the formation of banks and insurance companies, manufacturing, mining, mechanical and chemical companies, railroad, plank road and turnpike companies, bridge companies, telegraph companies; also for incorporating religious, charitable, scientific and missionary societies, for village corporations and rural cemetery associations.

These general laws embrace a very large number of objects for which special charters were granted prior to the adoption of the present constitution. Indeed under the former constitution no general law could be passed for the formation of corporations. The rule established by it was, that "the assent of two-thirds of the members elected to each branch of the Legislature should be requisite to every bill creating, continuing, altering or renewing any body politic or corporate;" and it was to obviate the evils which had grown up under that provision of our former constitution, and to relieve the Legislature from the great and burthensome duty of passing special acts of incorporation in the very numerous cases in which such acts were applied for, that the provisions in the present constitution were adopted. Such general laws, it was supposed, would lessen the labors of the Legislature, and enable them to transact the proper business of a general character which would come before them within the hundred days for which they are to be compensated for their services to the public.

It was intended to remedy the evils that had grown up under the restrictive system contained in the constitution of 1821, by throwing the doors wide open, and permitting all equally to participate in the benefits to be derived from the grant of corporate franchises.

We think the general rule is and should be, in conformity to the spirit and intention of the constitution, that all corporations created for purposes of gain to the individual corporators, by the employment of labor or capital, should be formed under general laws. There may be proper and just exceptions to this rule, but they must be very rare, and cases of a very extraordinary character. There is no corporation but what may be formed under a general law, but there may possibly be cases where the proper and legitimate object which the government desires should be accomplished by the creation of the corporation, would be defeated, unless the corporation was invested with the powers, franchises, and immunities which could only be secured by special act, and which it would be unsafe and impolitic to confer on all by a general law. These cases would be exceptions to the general rule laid down, and although the committee can state the general rule, they cannot state the exceptions. They can, however, imagine many cases where the objects which the individual corporators desire to attain, could not be attained under general laws. They may, and generally do desire to attain advantages and immunities in the transaction of their business, or in the value and sale of shares of their capital stock, which cannot be attained under general laws, which confer equal privileges and advantages on all.

But the Legislature have no right to regard the attainment of such objects, in forming a judgment as to whether the objects to be attained by the creation of a corporation can be attained under general laws. Objects of this character are the very objects which the constitution intended should not be attained, in the erection of corporations.

The committee are at a loss to perceive how an enlightened and impartial judgment on the part of the Legislature, can discriminate between corporations formed for the purposes of associating capital, or capital and labor, with the view of gain to individual corporators, and declare that the objects to be attained by the formation of one class of such corporations can be attained under general laws, and that another class having the same general object can only attain the objects of their creation by having the immunities and exclusiveness of a special grant.

If the premises laid down are well founded, it follows that the Legislature has no power to pass the special act referred to the committee, entitled "An act to incorporate the United States Mail Steamship Company." That and all corporations having the same general object, must, in the judgment of the committee, be formed under general laws.

The committee do not see any valid objection to authorizing companies to be formed under a general law, for the purpose of building and owning steam vessels to be navigated on the ocean, nor can they see how the legitimate objects to be attained by the formation of such companies, can in any way be defeated by authorizing them to be formed under general laws, by which all who wish to engage in enterprises of a similar character, can associate and form a company without the trouble and expense of making a special application to the Legislature. There is nothing in the business which requires that those who engage in it should be clothed with any special or exclusive privileges, or franchises. Many enterprises as extensive and beneficial as the one proposed to be carried on under the provisions of the bill referred to the committee, have been successfully prosecuted by joint stock associations. All the large lines of English ocean steamers, and packet ships, it is believed, have been carried on by joint stock unincorporated associations.

The committee are aware that precedents in favor of incorporating similar companies by special act, are found, and urged as a good reason why the present application should be granted. But a clearly erroneous construction of the constitution ought not to be sustained merely on the ground of precedent.

Since the adoption of the present constitution, six special acts have been passed by the Legislature incorporating ocean steamship companies. One of them was in 1847, three in 1848, and two in 1849. The number of applications made to the Legislature for such incorporations forms a strong reason in favor of the policy of a general law.

The force of these precedents is however somewhat weakened by the fact, that the same Legislature which incorporated three steamship companies also incorporated two companies for the purpose of erecting taverns. If the Legislatures of 1848 and 1849 determined that in their judgment the proper and legitimate objects to be attained by the creation of corporations to build taverns, could not be attained except by forming such corporations by special acts, they probably formed a judgment on that question widely different from the rest of mankind.

The committee do not desire to be understood by anything contained in this report, that they are opposed to the formation or the incorporation in conformity with the provisions of the constitution, of ocean steam navigation companies. Enterprises of this character, which are greatly beneficial to our commercial emporium, tending to draw and concentrate there commerce and wealth from all parts of the world, as well as to strenghthen our national marine, deserve and should receive from the State such encouragement and protection as it can, in conformity to the constitution, properly afford.

With this expression of the views and opinion of the committee' on the question referred to them, they respectfully submit for the consideration of the Senate the following resolution:

Resolved, That the proper and legitimate object to be attained by the creation of the United States Mail Steamship Company can, in the judgment of the Senate, be attained under a general law, authorizing the formation of such companies, and that the same cannot therefore be created by special act, in conformity to the provisions of the constitution.

GEO. R. BABCOCK,
CHA'S A. MANN.

MINORITY REPORT.

Mr. Schoonmaker, from the committee on the judiciary, to which was referred the bill from the Assembly entitled "An act to incorporate the United States Mail Steam Ship Company," to inquire and report upon its constitutionality, having dissented from the report made by the majority of the said committee,

REPORTS:

That he has had the aforesaid bill under consideration, and has examined its provisions, and the provisions of the constitution in relation to which the opinion and views of the committee have been required by the Senate.

The first section of article 8 of the constitution is in the following words:

"Corporations may be formed under general laws; but shall not be created by special act, except for municipal purposes, and in cases where, *in the judgment of the Legislature, the objects of the corporation cannot be attained by general laws.*"

For the purpose of answering the question submitted to the committee, it is necessary to give a construction to this section of the constitution. In giving that construction, the undersigned supposes that, upon well settled principles of law, it should receive a liberal and reasonable exposition; and one which will rather give efficacy and force to the government, than that which will restrict and impair its powers. In a constitution framed as is the constitution of this State, conferring legislative powers for the general good and the benefit of the citizen, no interpretation can be sound or tolerable which unnecessarily restricts and limits the Legislature in the exercise of the proper means to promote the interests of the public and its citizens.

It is undoubtedly true that the convention, in preparing, and the people, in adopting, the present constitution, have by the section quoted above expressed a preference for general laws rather than special acts, in case *all* the objects of the corporation can be attained under a general law. But it is also true that they have submitted to the "judgment of the Legislature" the entire question as to the feasibility of a general law accomplishing the objects of the corporation. And in the proper construction of that section, the Legislature are not to limit themselves to the *general* object of the corporation, but are to consider *all* the objects, singly and together, and then form a deliberate judgment as to whether *all* those objects can or cannot be attained under general laws. The naked fact, or mere power to pass a general law in a given case, is not alone to be considered in forming such judgment, but all the accessories; whether it is wise, necessary and expedient in relation to the character of the charters, the accomplishment of each and every of the intended objects, and the question whether the public good will be best promoted, are all to be regarded in making it up. And if general laws, in the opinion of the Legislature, will probably fail as to any particular corporation, in either or any of such accessories, the restriction is removed, and a special act may be passed. Let any more restricted construction than this be given to such provision of the constitution, and its *spirit* is destroyed, and its *letter* is cramped. Let such construction of the constitution be carried out, as is urged and insisted on by the majority of the committee, and in accordance with their views; let the constitution be construed strictly that no special charters can be granted in any case, where general laws may be created, and the provisions of that instrument, referring it to the judgment of the Legislature is utterly annihilated; for it is true, general laws may be made for any and every object; but the difficulty consists in so framing the laws as to answer all the intended objects, and at the same time properly protect the community. In general laws, intended to cover many associations and different localities and interests, if they are provided with all the necessary guards and checks to protect from danger, they are made so oppressive and stringent that no incorporations will be formed under them; and thus the law itself defeats its own object. The masses are deprived of the benefits of the charter, and the monopoly is perpetuated in large capitalists. Then on the other hand, strip the general law of these guards and checks, and the welfare of society and the community is endangered by the existence of corporations without restraint or restriction. Such are some of the shoals and quicksands into which we run by giving such strict construction to the constitution as insisted on by the majority of the committee. And it goes beyond, far beyond, what was ever intended by the members of the constitutional convention. The effort was there made to restrain and restrict the Legislature by express provision, to an extent not far, if any, removed from the effect of the construction of the majority of the committee. It was voted down by an overwhelming vote; and as a compromise, this plastic provision, leaving it entirely to the judgment and discretion of the Legislature, was introduced.

There can be no doubt, and the published debates show conclusively, that the object and intent of the framers of the constitution, in the adoption of such provision, embraced in the above quoted section, was mainly to restrain the too frequent recurrence to the Legislature for special grants of corporate powers, beyond this, the provision effects nothing; for so far as like grants are made for the same object, to any class of applicants engaged in the same pursuit, and whom the Legislature may approve, they become in fact as general in effect as if embodied in or conferred by a general law. Nor are such charters, if the grant be made to all who may embark in these enterprises, if approved by the Legislature, less open to all who may comply with the provisions of particular enactments, than with the requirements of a general law. The objection then is mainly to the renewed application for charters for the same object, and not to the grant by the Legislature of chartered privileges. In relation to the class of objects under consideration, they must of necessity be few in number, and may be well regarded as a class of applications in which the Legislature should be the judge in each particular case.

Before proceeding to a review of the particular provisions and objects of the bill under consideration, the undersigned would call the attention of the Senate to the legislative construction which has already been given to the constitutional provision under consideration. In 1847, 1848 and 1849, shortly after the new constitution went into operation, no less than six special acts were passed, incorporating as many companies for similar purposes, and with the same powers, as the bill referred to your committee. And in fact the question here is simply the re-enactment of a law which was passed in 1848, but became inoperative by non-user. If it was constitutional then, it is no less so now. Such legislative construction has been well said to be one of " the most unexceptionable sources of collateral interpretation." And in relation to such practical exposition, a learned commentator has truly remarked, " How light, compared with these means of instruction, are the private lucubrations of the closet, or the retired speculations of ingenious minds, intent on theory or *general views.*"

Upon a careful investigation of the provisions of the constitution, and the peculiar duties and enlarged objects contemplated by the act under consideration, the undersigned is clearly of opinion that such act does not come within any mandatory provision of the constitution, and is of a nature which precludes the practicability of passing a general law by which these objects can be attained.

Such opinion of the undersigned, being in a measure based upon the peculiar objects of this act, together with those of a kindred character, passed at a previous session of the Legislature, it is proper that he should advert to them, as affording very decided reasons why, if general laws may be made applicable to other pursuits or objects, they cannot be applied, consistently with the public interests and the due encouragement of such undertakings, to these.

Three years since, the congress of the United States, desirous to combine the highest practicable American skill and enterprise in the construction of steamships, and encourage the building of ships of the largest capacity and most approved model, that should afford to the government, if the exigency should arise, not only a national steam marine, effective for national uses, but that could meanwhile be employed in conveying the mails to foreign countries, and to distant portions of our own territory, authorized contracts to be entered into with several individuals and parties for that purpose. These have been carried out, or are in the course of being carried out, under separate charters, granted by the Legislature in 1848 and 1849. Under these, steamships have been built and others are now in progress, surpassing any heretofore constructed in this country, and superior indeed to the steamships of any country in the world. In size, model, and speed they have no equals.

In the course of the present year, a steam marine of at least twenty large ships will traverse the waters of the Atlantic, the Pacific, and the German oceans. They have given an impetus to the practical labors of machinists, engine-makers and builders in this country, which has served greatly to advance those arts, and promote and improve home skill and industry. They have tested the capacity and enterprise of our countrymen, and have combined, with the government encouragement, it is believed for the public good, the energies and means of American citizens, residents of our own State, and identified with its growth and prosperity. They have materially aided in rendering the commerce of the world, at least the commerce of this continent, tributary to our great commercial emporium. Already they have taken the place of English steamships, which, until these efforts were put forth, engrossed the intercourse by steam with European ports, and with the distant ports of this continent; and they will soon, if not interrupted by legislative interference or by legislative instability, bear away the palm of naval superiority in the old world as in the new.

The public policy has been, to promote these great and useful enterprises by such legislation as was proper and expedient in itself, and calculated to facilitate the business in which they were engaged.

It is due to the subject and to Legislatures which in previous years have passed similar acts of incorporation, to say, that this has been done upon full consideration, and from enlarged public views, and these have been confirmed by the results. There are four or five companies which have, under engagements with the government of the United States, produced this noble fleet of steamships, unsurpassed in size and adaptation to the purposes of trade, travel, transportation, commercial intercourse, for conveying the mails, and for the public defence, belong exclusively to our own State. They all centre in our great commercial city, increase and facilitate its commerce and intercourse with the world, and have particularly contributed to the intercourse with the far western states of this republic, bringing back to our own artisans their rich products.

Hitherto every charter applied for has been liberally and freely granted. It is believed that had these been withheld, the accomplishment of these useful purposes, so directly connected with the important navigating interests of the country, and of the city of New-York, would have been postponed if not altogether defeated, or these associations, forming under the patronage of the general government, would have been driven to the protection of sister states, governed by a wiser and more benign policy, to confer their benefits upon rival cities to the injury of our own commercial metropolis. It is not believed by the undersigned that a general law could have been framed, under the peculiar features of these pursuits, by which those ends could have been attained. The undersigned does not perceive the justice or sound policy of abrogating these charters and changing a policy which has worked well practically, and to which no valid objection can be made in theory. Interests and rights have grown up under the faith of past legislation, which no considerations of public utility require should be needlessly invaded or disturbed.

While therefore the undersigned believes that there are cases in which general laws subserve the general welfare and the public good, and are required by the provisions of the constitution, he does not regard this bill as coming within such a class of enactments, but rather of those in which the Legislature ought to retain and exercise its functions in each separate application for a charter. The provision of the constitution in its spirit and scope, was intended to be benign and salutary in its operation, and not by a forced application of it to disregard these considerations. In the judgment therefore of the undersigned, the minority of said committee, the passage of the bill to incorporate the United States Mail Steamship Company is constitutional and expedient, and he recommends the adoption of the following resolution:

Resolved, That in the judgment of the Senate the objects of the United States Mail Steamship Company cannot be attained under general laws.

M. SCHOONMAKER.

State of New-York.

No. 80.

IN SENATE, MARCH 9, 1850.

COMMUNICATION

From the Medical Society of the State of New-York in relation to resolutions proposing to petition the Legislature to amend the law of the State with regard to the collection of vital statistics.

Medical Society of the State of New-York,
February 6, 1850.

The committee to which was referred the resolutions of Dr. Jones, proposing to petition the Legislature to amend the law of the State with regard to the collection of vital statistics, (births, deaths and marriages bill,) made the following

REPORT:

Which, after being duly considered and amended, was unanimously adopted, in the words following:

1. *Resolved,* That it is the opinion of the Society that the collection of information with regard to vital statistics is of great importance to the people of this State.

2. *Resolved,* That the law now in operation does not effect the purpose for which it was passed, and that it is onerous and burdensome; both which faults need correction before the full benefits intended to accrue from its passage will be obtained.

3. *Resolved,* That at least a statistical account of the births, with the names and ages of the parents; and of deaths, with the names, sex, age, occupation, country of birth, and disease of persons so dying, should be obtained and tabulated by a law of this State, passed for that purpose; and that the cause of death shall in all cases be ascertained from the record of the attending physician.

4. *Resolved,* That in the opinion of this society, the present law should be so amended as to make it the duty of the trustees and other persons, whose duty it now is, to enumerate the children of their respective districts, to collect the above information at the time and in the manner said enumeration of children is taken, and that suitable blanks be furnished by the Superintendent of Common Schools for that purpose.

5. *Resolved,* That the trustees should fill such blanks with such facts as the Superintendent shall require of them, make affidavit to the truth of the same, forward one copy by mail to the Superintendent of Common Schools, and file another copy with the town superintendent of common schools, for their respective towns, and that said report be made matter of record by the town clerk.

6. *Resolved,* That a tabulated document, formed by a competent person, from these statistics so collected, will be of immense importance to an intelligent community, and furnish great aid in all legislation hereafter to arise in matters relating to human health.

7. *Resolved,* That Drs. Beck, McNaughton and Thompson be a committee to present the above resolutions to the Legislature.

(A true copy.) P. VAN BUREN,
Secretary.

State of New-York.

No. 81.

IN SENATE, MARCH 12, 1850.

REPORT

Of the committee on cities and villages on petitions relating to intramural interments.

Mr. Cross, from the committee on cities and villages, to which was referred numerous petitions from the cities of New-York and Brooklyn, the village of Williamsburgh and other places, praying the Legislature to prohibit interments and deposits of the dead in vaults in all the cities and villages of the State,

REPORTS:

That your committee have given to these petitions such respectful consideration as the vast importance of the subject demands. The great number of the petitioners, and their greater weight of character, would entitle their petition to most respectful consideration, even if the relief they demanded was of an equivocal or doubtful character. But when they come before us, asking in good faith, the abatement of a nuisance injurious to the public health and dangerous to human life, the Legislature is bound to aid them by every means in their power not inconsistent with private right. And if the existence of the nuisance is established, and the fact that it is eminently dangerous to the people of the vicinage is proved, then private right must yield before the stronger claim of the general good. The petitioners insist that the practice of burying the dead in the midst of a dense and crowded population has been proved by the experience of the past and the testimony of medical men, to be destructive of human health and life, and they therefore pray the passage of a law to prohibit "all burials and all deposits in vaults of dead bodies in any city or village of the State."

An attempt to pass a law prohibiting interments in *all* the cities *and villages* of the State would meet with most determined opposition. Great reforms of long existing abuses are effected by slow and sometimes almost imperceptible degrees. Every attempt to force them in advance of the progress of public opinion, the great lever by which social or moral reform must be obtained, tends to retard the desired result. The necessity for such a law is not yet universally understood in the country, and until that condition is brought home the people will be unwilling to abandon their village cemeteries.

There is no spot of earth that holds in the human heart a more undying interest than the place where the remains of its worshipped dead repose. In civilized as well as savage lands this principle obtains. It has existed as far back in the past as any record of humanity extends. The grave-yard where the remains of the loved are mouldering back to dust, ever has been and forever will be full of cherished though mournful recollections. It is true perhaps, that veneration for the sanctuary of the dead is deeper, more holy and intense, where civilization and refinement have shed their brightest light. But it is a feeling, a principle unconfined by conditions tongues or nations. It is and forever will be universal,

> "From green Machpelah's honor'd field,
> Where Jacob and where Leah lie,"

to the humble tumuli of earth and stone heaped upon the dead in our western wildwoods,

> "By the poor Indian, whose untutor'd mind
> Sees God in clouds or hears Him in the wind."

No great and imperative necessity as yet exists for the prohibition by law, in many of the cities and villages of the State, of intramural interments, but as time advances and population increases that necessity will sooner or later be discovered.

But so far as the cities of New-York and Brooklyn and the neighboring village of Williamsburgh are concerned, their citizens, from the petitions before us, appear to be not only prepared for the prohibition, but anxious for its enactment. If the evidence that has been furnished for the consideration of the committee is to be believed, the citizens of these localities, and perhaps of other cities, should demand the passage of the law as a measure of imperative necessity for self preservation. It appears from the report of the city inspector that the number of deaths in the city of New-York in the year 1848, was fifteen thousand nine hundred and nineteen. That of this vast number eleven thousand and fifty-six were interred or deposited in vaults within the city. In 1845 the city inspector in his report said, "Our grave yards and places of interment require some notice at my hands. In many, probably *all* of the grounds used for this purpose, it is wholly impossible to conform to the law requiring the corpse to be interred at least six feet below the surface. This is in consequence of the same ground having been used for many years for the deposit of human remains, and layer upon layer of such remains have been made until it has become impossible in many instances to go half the depth required by law, and in a porous and open soil like that of this Island, offensive and unwholesome exhalations will inevitably find their way through the ground to the surface, and thus vitiate the atmosphere."

The London Times of 29th December, 1848, says: "It is a fact not sufficiently known that within the present year very nearly 13,000 persons have been buried within the precints of the metropolis. The custom of intramural interment is one which cannot be too strongly deprecated. Not only is it productive of practices which must be shocking to the feelings of surviving relatives, but it acts directly upon the public health in a manner which has been allowed by the highest medical testimony to be peculiarly injurious to life. We can widen streets, flush sewers, enforce ventilation, sweep away heaps of abomination, and in many respects make the condition of life in the metropolis more favorable than even the rural districts. All our endeavors, however, will be in vain so long as we are liable to have our atmosphere tainted with the putrid exhalations of dead bodies." Sir Benjamin Brodie, in his examination before a committee of the British parliament, informed them "that the gas evolved from putrid bodies is chiefly sulphuretted hydrogen, a gas so noxious and so deadly that the admixture of *one part of it with five hundred parts of atmospheric air is instantly fatal.*"

On this subject, Professor Hoosick says: "I would recommend that interments should be exclusively confined to public and private vaults, and that no grave should be permitted, under any circumstances;

for such is the loose texture of the soil in our grave-yards where this mode of burial is practiced, that as soon as the decomposition of the body has begun, the gases which are extricated will find egress and mix with the atmosphere, rendering it more or less offensive and impure, and consequently a medium of spreading contagious diseases that may be introduced within the sphere to which such impure air may extend."

Professor Walker, of London, in a lecture delivered before the Mechanics' Institute, uses the following language: "Let me again remind you that the proper average of burials is one hundred and thirty-six per acre annually. This simple fact will give you an idea of what must take place when either cupidity, necessity, or neglect, increases this average from one hundred and thirty six to two thousand three hundred and twenty-three. Hence the stacking of coffins in deep pits, the brutal dismemberment of bodies, the consumption of coffin wood in many localities, the absolute supersaturation of the soil, which can neither retain or dissolve the putrescent matter with which it is loaded; hence the daily scenes which outrage every moral and religious sentiment; hence the danger to mourners from attending funerals in such places; hence the insidious infection which (more especially in the warm season) poisons the atmosphere, and thereby undermining health or begetting disease, hurries thousands to an untimely end, again to become the subjects of fresh indignities, the centers of infection to survivors, the distributors of pestilential emanations, and the centralizers of disease. The whole arrangement is in fact an abomination, a disgrace to the age in which we live, and to the community amongst which it is permitted to endure. We would ask any person who may be disposed to hesitate in opinion upon the subject, simply to walk past any of these sinks of impurity, the urban church yards, and we will venture to affirm that in his mind the question will be set at rest forever."

After enumerating various instances, almost too revolting for publication, this eminent surgeon concludes his lecture as follows:

"This subject is inexpressibly painful and revolting, but it is at the same time of such importance to the health of the community that it must be enforced upon the public attention again and again. *Any measure for the health of the metropolis which shall not include as one of its principal features an absolute veto upon intramural interment, will be incomplete and ineffective.* Let no one deceive himself with the idea that however fortunately he may be placed, he is preserved from the danger of infection from this source."

At a recent court of common council in London, Mr. Anderton moved "that the court do petition parliament to pass an act to prohibit the interment of the dead in churches and church-yards, within the city of London, and other large cities and towns. The motion was carried by acclamation. Mr. Anderton, in supporting his motion, spoke of the horrors that accumulated at the very doors of the citizens. He showed by statistical documents that by burying the dead in the city, the seeds of pestilence and death were scattered amongst the living."

Dr. Lynch supported the motion, and remarked "that two thousand years ago the Roman commonwealth passed laws against burying in cities. He wondered how so frightful a practice as burying in cities, which produced such horrible effects, could have been so long tolerated. The proportion of *twelve-thirteenths of the dead human body was dissipated in the air we breathe*, and disease was daily resulting from exposure to the foul and pestilential exhalation of the grave-yard. The festering, putrid matter was allowed unrestricted vent and diffusion every time a grave was opened." Dr. Lynch further pointed to the narrow plot of ground, reeking with pestilence, heaped with the remains of centuries of decay, its soil supersaturated with sulphuric, hydrogen and carbonic acid gas, its surface strewed with bones and moist with matter, and exhalations alike disgusting to the senses and destructive to health. In summer the smell from the vaults was easily perceptible in many of the best churches. People often returned home from them afflicted with headaches, vomiting, and fainting fits. The house of God was thus filled with poisonous emanations; it was in fact a charnel-house, and the grandeur of the sanctuary was made, by the present abominable system, to have an interest in its pollution."

The experience of Paris on this subject is also instructive. The legislature of France, in 1773, alarmed by the disease-spreading exhalations which arose from interments in churches and church-yards, interfered and forbid interments in the Cemetery of the Innocents, and in a few years all the burial places in the interior of the French metropolis were closed; and now the rural cemeteries of Montmatre, on the north, and Pere La Chaise, on the east, receive and hold the dead from the capital of France.

The details of the disgusting manner in which interments are conducted in times of unusual mortality have often appeared in the public prints and journals of the day. Let a single extract suffice for the purposes of this report: "The coroner was yesterday called upon to visit the Catholic burying-ground, (potters' field.) The coroner, while on the ground took occasion to look at the mode of burial in this cemetery, and his investigations resulted in the discovery of a number of trenches, about one hundred feet long, twenty feet deep, and about seven feet wide. Into these trenches the coffins are placed in layers, and not covered with earth until the trenches are filled. There were hundreds, if not thousands, of these coffins exposed to view. Somebody surely is obnoxious to loud censure. It is indeed shameful."

On this subject a letter was received by the committee from a gentleman of the highest standing and undoubted veracity, in which he says: "In the 6th avenue, near to 12th street, last summer the corpses, during the cholera, were piled under a small church, until the human putrescence run out in streams. Death from cholera occurred in the adjoining houses, and so extensive was the deathly miasma arising from the deposit, that the neighbors were obliged to and did move away; and at the distance of blocks, citizens were obliged to shut down their windows, though stifling with oppressive heat. The cholera in this vicinity was prevalent and fatal."

A report was made in 1849 by the general board of health in England, repudiating the theory of *contagion*, and contending that the diseases heretofore supposed to be contagious are not in truth communicable from one person to another by contact, that the virus cannot be transported in merchandize, but that the plague, typhus, yellow fever, scarletina, influenza and cholera, are all fevers depending on certain atmospheric conditions, obeying similar laws of diffusion, infecting the same sort of localities," &c.

The truth of the report just quoted would seem to be strongly fortified and sustained by the well known fact that the cholera and yellow fever are unknown upon the mountains of the interior. Where the air is pure these dangerous diseases never come. They make their first appearance either in the crowded hold of the ship, where filth and miasma abound, or in the vilest localities in cities, where pestilential vapors float in every passing breeze, and where putrid exhalations from hecatombs of human dead furnish the sulphuretted hydrogen that is in fact the angel of death.

The deposit of the dead in the city grave is anything but consigning them to quiet and undisturbed repose. The car of improvement and progress turns not aside from the habitations of the living or the resting place of the dead. The opening of streets or the grading of the surface is not arrested on reaching the "settlements" of the buried dead. The grave-yards are torn up from their foundations. The mouldered remains of the once venerated but now fogotten dead are disturbed in their narrow home, and the coffin, the robe, and the more sacred dust of the body, is sold at six pence a load, to fill up a new dock in the metropolis; the bones are ground up for manuring the exhausted soil, while upon the sides of the street coffins, in tiers, lie exposed, their contents strewn upon the ground, and the skulls, jaws and other bones are crushed beneath the feet, a nuisance to the vicinage and a disgrace to humanity itself.

Your committee cannot of course be expected to present much that is new or unknown in cities in relation to this subject. They have not the requisite professional skill derived from long years of study or practice, to enable them to trace the effects of malignant and epidemic diseases to their causes. They do not belong even to the medical profession, and the memorials in these cases have been rather inappropriately referred to them. It would be unwise and unsafe for the committee to advance opinions or theories of their own upon a subject so deeply interesting to mankind. They can but repeat and refer to that which more able and distinguished men have written. Even in discharging that humble duty, they are compelled by the want of time and space, to compress and condense as much as possible, consistent with a fair discharge of the duty assigned them.

The committee have no motive but to promote the public health and general good. They feel anxious to foster the feeling of veneration for the home of the "sainted dead," so long and so fondly cherished by the American people. Those affections that cluster over the graves of the loved and departed are among the purest and most holy that the human heart can feel. No stains of interest or of earth can commingle with them. They live deep in the heart's most sacred cell, purifying it from the defilements of earth, weaning the soul from the cares and vicissitudes of this life, and pointing its hopes to a brighter and better one beyond the grave. These are among the strongest incentives to virtue and to piety. Let them remain and strengthen then while time shall last or the earth endures.

Nothing can do more to foster these sacred hopes than the discontinuance of the baneful practice of burying the dead in cities and large towns, and the establishment of rural cemeteries, away from the noise of busy life. There the heart of the bereaved can pour forth its incense in the still solitude of its own bereavement. There the hand of affection may bring its offering of flowers to deck the grave of the departed. There the bereaved mourner, beneath the twinkle of "cold, unsympathizing stars," in the still night, may hold communion with the spirit of the loved and lost; and there the hope shall grow that when "life's fitful fever" is ended, the severed shall re-unite in heaven.

The vast importance of the subject to every growing town and village in the State has alone induced the committee to make a written report in this case. They deemed it their duty, when the question was before them, to seize the opportunity to spread a few of the facts before the public at large. Their object has been to awaken inquiry upon a matter that should interest the State. If they shall have succeeded in doing this, their object and design will be attained. There is no time better than the present to begin a work of reform. The public mind is as ripe for it now as it ever will be, wherever the people are informed upon the subject. And where the question has never been discussed, this report may aid to bring it into life. Taste, neatness, feeling, propriety and health alike demand that the prayer of the petitioners should be granted.

The petitions before us come in the main from three localities. The committees have not, therefore, felt themselves at liberty to report a general law embracing the whole State, but have confined its operation to the localities that ask it. Even to this they have attached some exceptions; but they believe the day is not distant when the practice of burying the dead in graves, or depositing in vaults, public or private, in cities and large towns, will be entirely prohibited by law. Your committee, therefore, ask leave to introduce a bill in accordance in part with the prayer of the petitioners.

State of New-York.

No. 82.

IN SENATE, MARCH 15, 1850.

REPORT

Of the Select Committee on the bill to pay W. W. Niles for the loss of his property on Long Island Farms.

The committee to which was referred the bill in relation to the claim of William W. Niles, for the destruction of certain property on Long Island farms, in May, 1847, have had the same under consideration. The committee has been aided in its deliberations by the following letter from Hon. John C. Spencer, on the subject of this claim, and of the obligation of the State to pay the same, viz:

Mr. William W. Niles:

Sir—I have examined the report of the select committee of the Senate, (Senate Doc. No. 31, of 1849,) appointed to examine your claim for the destruction and waste of certain buildings leased by you to the Commissioners of Emigration, and the report of the Attorney General (Senate Doc. No. 61, of 1850,) upon the subject, and at your request proceed to give you my views upon the natnre and extent of your claim and of the mode in which provision for your remuneration may be made by the Legislature without violating private rights or constitutional injunctions.

The question is somewhat new and peculiar and may therefore require more ample discussion than is usual.

A brief statement of facts, taken from the report of the committee, is necessary to a proper consideration of the subject. You were the owner of certain extensive buildings in Newtown, on Long Island, which in May, 1847, you leased to the Commissioners of Emigration for two months, at the rate of two hundred dollars per month; of which they paid you one month's rent in advance. At the time and previous to the leasing, the commissioners were apprised of a high state of excitement among the people in the vicinity against the occupation of the buildings for sick emigrants. You seem also to have had some apprehensions, and took every reasonable precaution that humanity could dictate, in consulting two eminent physicians, who had previously had charge of hospitals and were well acquainted with the nature of ship fever, and who advised you that no injury could ensue to the neighborhood, with proper care, from such a use of the buildings. Although you had leased the buildings, yet with a commendable prudence you sent your son and hired man to guard them during the night when they were attacked. This was not done in your character of owner or occupant, for the arrangement between you and the commissioners was complete, and they were the legal occupants. That the commissioners themselves did not adopt any similar precautions, although abundantly warned of their necessity, is a material fact, entering much into the question of negligence. These buildings were assailed and destroyed by a riotous mob of one hundred or more persons, while they were thus in the possession of the commissioners. And this destruction was caused by the act of the commissioners, as the agents of the State, in appropriating the buildings to the relief of sick emigrants.

Here, then, was an act of waste by which you have sustained great loss, and the question is, who is responsible for that loss?

I think I can satisfy any reasonable person that if the commissioners had been acting in their individual capacities, they would have been personally liable to you for this waste.

Blackstone in his 2nd Commentaries, p. 283, states that by the ancient common law, waste was not punishable when committed by tenants for life or years, on the ground that as the tenants occupied by agreement, provision for waste could be made in the lease, and if not thus provided for, it was the fault of the lessor. He then proceeds: "But in favor of the owners of the inheritance the statutes of

Marlbridge, 52 Hen. III, ch. 23, and of Goucester, 6 Ed. 1, ch. 5, provided that the writ of waste should lie not only against tenants by the curtesy or those in dower, but against any farmer or other that holds in any manner for life or years. So that for above five hundred years all tenants merely for life or for any less estate, have been punishable and liable to be impeached for waste, both voluntary and permissive, unless their leases be made, as sometimes they are, without impeachment of waste," &c. The English statutes referred to by Blackstone, were re-enacted in this State in 1787, see vol. 1, Rev. Laws of 1813, p. 62, and they were condensed and incorporated in the Revised Statutes, see vol. 2, p. 334, p. 458, 3d ed.

Blackstone speaks of two kinds of waste, voluntary and permissive. The first is where the tenant does the act directly; the other, where he suffers it to be done, or does not prevent it. Thus, Coke says, (Co. Litt., 536,) burning of the house by *negligence* or *mischance*, is waste. The history of the law on the subject is given in Hargrave and Butler's notes upon Coke Littleton, note 377 to 53 a, thus: " At common law lessees were not answerable to the landlords for accidental or negligent burning; then came the statute of Gloucester, which by making tenants for life or years liable for waste without any exceptions, consequently rendered them amenable for destruction by fire. Thus stood the law in Lord Coke's time, but now the 6 Ann. ch. 31, exempts all persons from action for *accidental* fire in any house, except in case of special agreement between landlord and tenant." The statute of Anne has never been enacted in this State.

But before the passage of that statute exceptions and qualifications of the liability of tenants had been introduced. The following positions are taken from Viner's Abridgement, *Waste I:* If a house fall by tempest, he (the tenant) shall be excused. The same law, if the house be dejected by a great wind. So, if a house be abated by lightning. But if a house be burnt by negligence or mischance, it is waste.

Same title, K. If strangers, enemies of the king, destroy a house, or by sudden tempest it be burned down, waste does not lie. But, *contra*, if it be by enemies, traitorous subjects of the king.

Same title K. If a stranger commits the waste, yet an action of waste lies against the lessee; for in a trespass he (the lessee) shall recover his damages against the stranger. Same, in a note, quoting 1 Inst. 145, 146: "The statute of Marlbridge prohibits that farmers shall not do waste, and yet, if they suffer a stranger to do waste they shall be charged with it, for it is presumed in law that the former may withstand it. *Et qui non obstat, quod obstare potest facere videtur.* [He who does not oppose what he may oppose, is deemed to have done it.] 2ndly. The law doth give every man his proper action, so as that none of them be without due remedy; and therefore in this case the lessor shall have his action of waste against the lessee, and the lessee his action of trespass against him who did the waste, and so the loss as reason requires in the end, shall be upon the wrong doer; and if the lessor should not have his action of waste, he would be without remedy."

"A termor shall be be punished for waste done by a stranger," citing Fitz. Nat. Brev. 60 G.

The above doctrine confirmed in Co. Litt. 54 a. "But tenant by the curtesy, tenant in dower, for life, years, &c., shall answer for the waste done by a stranger, and shall take their remedy."

Buller J. in his treatise on trials at Nisi Prius, p. 120, says, "Neither will it be any defence that a stranger did it, for if the plaintiff should not have his action of waste, he would be without remedy, and the defendant may bring trespass against the stranger and rerecover his damages."

It will be seen that the risk of tenants of houses is precisely like that of carriers, which is thus stated by Story J. in his treatise on Bailments, sec. 510; "the risk of all losses, except by the act of God or the king's enemies." The expression act of God, denotes natural accidents, such as lightning, earthquakes and tempests; or as Lord Mansfield defined it, "the act of God means something in opposition to the act of man."

Sec. 526. "What are and what are not losses by the king's enemies. By enemies is to be understood public enemies, with whom the nation itself is at open war; and not merely robbers, thieves, or other private depredators, however much they may be deemed in a moral sense, at war with society. Losses, therefore, which are occasioned by robbery on the highway, or by the depredations and violence of mobs, rioters and insurgents, &c., are not deemed losses by enemies under the meaning of the exception." These definitions are obviously equally applicable to the same terms, wherever used, and when Coke upon Litt., 53, says, that the defendant may give in evidence that the destruction of the house, &c., happened by lightning, tempest, the king's enemies, or other inevitable accident, the same meaning must be given to the terms he uses as in other cases.

And this liability of the tenant is wholly independent of any agreement between him and the lessor. Saunders Rep. by Williams, 2nd vol., 252, (c.) note 7. The editor says, speaking of the action on the case in the nature of waste: "but it is now become the usual action as well for permissive waste as voluntary waste; and when the lessee even covenants not to do waste, the lessor has his election either to bring an action on the case, or of covenant, against the lessee for waste during the term," citing 2 Black. Rep., 1111. All the authorities referred to, show that this liability for waste attaches in consequence of the relation of landlord and tenant, and irrespective of any agreement between them, except the agreement that the tenant shall not be liable or impeachable for waste.

The same case in Black. Rep., above quoted, decides that the action may be brought after the expiration of the term. As to what is "a tenancy for years," Black., 2 Com. 140, says: "if the lease be but for half a year, or a quarter, or any less time, the lessee is respected as a tenant for years." P. 143, "Every estate which must expire at a period certain and prefixed, by whatever words created, is an estate for years."

I think it must now be evident that the commissioners of emigration would have been liable as individuals for the destruction of the buildings hired by them and under their charge and care. The circumstances would justify the inference that they were liable on the ground of negligence for not adopting those precautions which a prudent man under the like circumstances, would have taken to guard the property. But they were at all events responsible for the buildings, and it has been abundantly shown that they are not excused by the fact that the waste was committed by strangers or by a tumultuous mob. In ordinary cases the reason and natural equity of the case would impose this responsibility. He, who, for hire and his own benefit, takes the temporary possession and charge of another's property, and has such a control over it that he could keep the original owner himself from all interference with it, must from the very nature of his undertaking, have all the responsibilities of the owner for the time being. More strongly does this reason apply to a case where the occupation is the very cause of the loss, and where the lessees are acting as public agents, and possessed of extraordinary means to repel a riotous attack.

The next question is, how far is the State responsible for the acts or omissions of the commissioners of emigration?

The commissioners were general agents in a particular business. Story on agency, Sec. 22, in such case, the principal is bound by the acts of the agent within the scope of his authority, although he violates his private instructions. And in case of a special agency, the principal is also liable for the acts of the agent within his authority. As the power to hire these buildings was clearly within the authority of the commissioners, it is not material whether they were general or special agents; although in reference to this subject the commissioners were undoubtedly general agents. The law on this subject, says Story on agency, Sec. 308, is the same as that between masters and servants. The master is always liable to third persons for the misfeasances and negligences, and omissions of duty in all cases of the servant acting within the scope of his employment. If then, the commissioners would be liable for the destruction of these buildings on their contract of hiring, then the principal is responsible, by virtue of their appointment by him. If they would be liable on the ground of negligence and omission, in the manner of performing their duties, then also is the principal clearly responsible.

Upon these principles, I think the Legislature are under a legal obligation to provide a mode of ascertaining the amount of the loss and injury sustained, and of paying it. Whether the payment should be made out of the emigration fund or out of the general fund of the State is a proper question for legislative decision. It seems to me that the fund created for the purpose of relieving sick emigrants should bear the charges and incidents occurring in its administration. But whichever fund is subjected to the burden, the payment will clearly be the discharge of an obligation, and not a gratuity, and therefore requires only the usual majority to pass the proper bill.

The testimony of builders, reported by the committee, fixes the value of the buildings destroyed, with considerable precision, while the evidence of opinion by others, who you think are prejudiced as partizans in the matter, very much reduces the supposed value. Under these circumstances, an investigation by competent and disinterested persons, upon testimony given on oath, of the value of the buildings, and the extent of the damage you have sustained, must be far more satisfactory and just, than the fixing any precise sum.

J. C. SPENCER.

Albany, March 5, 1850.

The majority of the committee, Mr. Mann dissenting, adopting the reasoning and conclusions of said letter, ask leave so to modify said bill as to make it read as follows, and as modified recommend its passage.

A. C. STONE,
C. CROLIUS.

(See Senate bill No. 185.)

State of New-York.

No. 83.

IN SENATE, MARCH 16, 1850.

REPORT

Of the Canal Commissioners on the several canals other than the Erie.

Canal Commissioner's Office,
Albany, March 5, 1850.

To the President of the Senate:

In compliance with the following resolution—

"In Senate, *Feb.* 12, 1850.

"*Resolved*, That the Canal Commissioners be requested to report to the Senate the plan or plans projected or adopted since 1st of January, 1848, for the enlargement of any of the State canals, other than the Erie canal; or of any channel, section or portion of the same now or hereafter to be connected therewith; (whether by said plan or plans connected therewith,) whether by said plan or plans or connections with other navigable waters are to be discontinued, and to what extent; the location, cost or estimated cost of each portion now under contract; the amount done and remaining to be done; the law by which authorized, and the fund out of which the cost of each is payable; also a description of the plan and estimates of the cost of rebuilding the several locks, except on the Erie canal, now under contract, of the original and of the enlarged size; the changes if any, in their location; the cost of bringing them into use, resulting from such changes, the authority for the same, and the fund from which the cost is payable.

"By order,
(Signed) W. H. BOGART, *Clerk.*"

The Canal Commissioners submit the following

REPORT:

That the Oswego Canal extends from Syracuse to Oswego, a distance of 38$\frac{26}{100}$ miles, 19$\frac{7}{10}$ miles of which is made by slack water in the Oswegó and Seneca rivers, and 18$\frac{56}{100}$ miles is independent canal. There are located upon it, 18 lift locks, 6 guard locks, 8 dams, 1 aqueduct, 2 waste weirs, 5 culverts, 4 double track, 16 single track, 1 farm, 2 towing-paths, and 6 change bridges.

This navigation, made up alternately of canal and river is, in many places, very difficult and expensive to maintain.

Act, chap. 214, Laws of 1849, is in the following words:

"The sum of one hundred thousand dollars appropriated to the Oswego canal, by chapter two hundred and sixty-two, laws of one thousand eight hundred and forty-seven, together with the interest accumulated thereon, is hereby re-appropriated, for the purpose of rebuilding the locks on said canal, as fast as the condition of said locks shall render it necessary to be done.

"It shall be the duty of the Canal Commissioners, in rebuilding the locks on said canal, to construct them of the size of the enlarged locks on the Erie canal; and when, in their opinion, the public interest will be promoted thereby, the said commissioners are hereby authorised to change the location of any of the said locks, and to diminish their number, and to do the necessary section work to bring them into use.

"It shall be the duty of said Canal Commissioners to cause accurate estimates to be made of the cost of rebuilding said locks of the present dimensions, and also of constructing the enlarged locks, and whatever the expense of such enlarged locks shall exceed the estimated cost of locks of the present dimensions, shall be paid out of the money hereby re-appropriated; and the residue of such cost, with the cost of such other work as may be constructed under this act, shall be charged to ordinary repairs."

Owing to the rapidly failing condition of the combined locks No. 9 and 10 at Fulton, and lock No. 15 at the "high-dam," it was found necessary to prepare the work for letting at these points, as early in the season of 1849, as the necessary surveys and estimates could be made.

For this purpose, and in view of so arranging the levels as to dispense with some of the structures (should the plan prove practicable), the portion between Oswego falls and Oswego, a distance of twelve miles was surveyed, and comparative estimates of the cost submitted;

1st. On the plan of continuing the present connection of the canal with the river.

2d. On the plan of separating it from the river, and dispensing with some of the structures.

The work now under contract on the Oswego canal consists of locks No. 8, 9 and 10; section No. 27, a half a mile in length; two road bridges at Fulton; locks No. 15, 16, 17 and 18; sections No. 36½, 37, 37½ and 38, each a half mile in length; one aqueduct, and one road bridge at Oswego.

The river portion of the canal, now made by dam No. 4, at Fulton, is half a mile in length, and embraces the main part of the section work now under contract at that point. At the point where the old canal leaves the pond, and in immediate contact with it, a mill-race has been constructed, on which a large milling interest is growing up. This, together with the machinery at each end of the dam, creates a large demand for water. Consequently, much difficulty has been experienced at this point from the want of water to supply the canal.

The new line at Oswego passes over the river portion made by dam No. 8, a mile and a half, then across the Oswego Company's mill-race, then along the same half a mile to the termination at Oswego. For many years past serious difficulties have been experienced on this portion of the canal, both from the want of water, which has been drawn for the use of machinery on the race, and from the danger of navigating it in consequence of the current. A large amount of machinery is also in motion on the west side of the river, and drawing water from the same source.

Much has been said in former reports of the Canal Commissioners in relation to it, and much has been done; still the navigation has at all times been difficult. The demand for water at this point, it is thought, will more than keep pace with any improvement, short of an entire separation of the canal from the race.

The result, therefore, has been the adoption of a plan which, when fully completed, will dispense with one dam and two guard locks at Fulton, one dam, one guard lock, and two change bridges at Oswego, making an entire separation of the canal from the river at Fulton by constructing an independent canal through the pond, and at Oswego by an independent canal from the "high dam," crossing the Oswego company's mill-race and canal by an aqueduct.

The estimates of the engineer are for an enlarged canal of 52 feet width at bottom and 7 feet water. The line follows a side hill the greater part of the distance from the high dam to the termination at Oswego. It adds but little to the cost of construction, whether the line is a few feet nearer or farther from the hill. It is intended to complete that portion from the terminating lock to the aqueduct in the city of Oswego, of the enlarged size, a distance of about half a mile. This being done, the citizens can make their erections along the same without the fear of being disturbed by the State in completing these unfinished portions of the canal through cities and villages. This is believed to be for the mutual interest of the State and the land owners adjoining the canal.

From the aqueduct to the high dam, a distance of about one and a half miles, the embankment will be raised to sufficient height to give four feet of water for navigation, which will reduce considerably the estimated cost of this work. These remarks will equally apply to the work through the village of Fulton.

The absence of the Engineer prevents us from stating the changes contemplated by his surveys, in the location of the locks between Oswego and Fulton, but the Commissioners understand that their present location will be substantially maintained.

There are but three points upon this canal where important and desirable alterations are required; these are at Oswego, at Fulton and Salina; these alterations the Commissioners have no hesitation in saying, the public interest requires. To re-build the locks at those points at their present locations, might well be considered a waste of money.

These improvements, when completed, will separate the present connection with the river at Fulton and Oswego. Locks will be required to continue this connection, but as the Commissioners have no power to construct them, none have been provided for.

The following statement shows the cost of re-building the locks now under contract on the Oswego canal of the original and of the enlarged size at engineer's estimated prices:

		Cost of Locks of original size.	Cost of Locks of enlarged size.
Guard lock No.	3,	$14,506 00	
do	4,	12,071 00	
do	6,	14,003 00	
Lift lock No.	8,	31,573 00	$41,331 00
do	9,	16,018 00	28,892 00
do	10,	16,018 00	25,834 00
do	15,	24,082 00	29,728 00
do	16,	20,718 00	29,180 00
do	17,	18,357 00	30,251 00
do	18,	18,357 00	36,745 00
		$185,703 00	$221,961 00

The following statement shows the cost of re-building the locks now under contract on the Oswego canal of the enlarged size, the amount done and remaining to be done:

	Cost of locks of enlarged size at contract prices.	Payments made on work done.	Work remaining to be done.
Lock No. 8,........	$34,480 00	$6,150 00	$28,330 00
do 9,........	27,296 00	10,615 00	16,681 00
do 10,........	24,100 00	11,060 00	13,040 00
do 15,........	24,101 00		24,101 00
do 16,........	22,440 00	1,230 00	21,210 00
do 17,........	24,071 00		24,071 00
do 18,........	30,728 00	500 00	30,228 00
	$187,216 00	$29,555 00	$157,661 00

Payments on the above work are made under act, chap. 214, Laws of 1849.

A statement showing the cost of the work under contract on the Oswego canal at contract prices, necessary to bring the locks into use, the amount done and remaining to be done.

	Cost at contract prices.	Payments made on work done.	Work remaining to be done.
Section No. 27,.......	$36,408 00	$630 00	$35,778 00
do 36½,......	26,555 00		26,555 00
do 37,.......	25,025 00		25,025 00
do 37½, ...	19,555 00	365 00	19,190 00
do 38,.......	49,447 00		49,447 00
Aqueduct at Oswego,...	27,600 00	350 00	27,250 00
2 road bridges at Fulton,	3,567 00		3,567 00
1 do at Oswego,	1,929 00		1,929 00
			$188,741 00
Moving buildings,.....		523 00	523 00
	$190,086 00	$1,868 00	$188,218 00

Payments on the above work are made under act, chap. 214, Laws of 1849.

CAYUGA AND SENECA CANAL.

This canal is 23 miles in length, extending from the Erie canal at Montezuma to the Cayuga lake at East Cayuga, and to the Seneca lake at Geneva. The most important structures upon it are 12 locks, 6 dams, 13 road, 1 farm, and 27 towing path bridges.

The navigation, commencing at Montezuma, is made up of an independent canal to East Cayuga, and the main line to Seneca lake is made up of alternate portions of independent canal and slack water navigation formed by dams in the Seneca river.

The locks on the line of this canal were constructed of wood, and are much decayed; they require the greatest care to preserve them in a condition for use.

Act, chap. 453, Laws of 1836, provides as follows:

"§ 1. The Canal Commissioners shall, as soon as the locks on the Cayuga and Seneca canal require to be rebuilt, rebuild said locks in a substantial manner with stone, and of the same width as the enlarged locks on the Erie canal."

§ 2. Relates to the Glens Falls feeder.

Act, Chap. 348, Laws of 1847, provides as follows:

"§ 1. Whenever in the opinion of the Canal Commissioners, it becomes necessary to substitute new locks for the old locks in the Cayuga and Seneca Canal, the Commissioners shall cause minute estimates to be made of the cost of rebuilding the lock or locks on the plan prescribed by the act entitled 'an act for the construction of the locks in the Cayuga and Seneca canal, and the west branch feeder of the Champlain canal,' passed May 25, 1836, and also minute estimates of the cost of constructing said locks of composite, of the same dimensions of the enlarged locks on the Erie canal, which estimates shall be submitted to the Canal Board, and when approved by that board, and if the expense of the composite locks of the enlarged size shall not exceed the expense of the stone locks as prescribed by the act of May 25, 1836, aforesaid, the Canal Commissioners shall proceed to construct the lock or locks on the enlarged plan, and the cost thereof shall be charged to the fund appropriated to ordinary repairs.

"§ 2. The said Commissioners may diminish the number of the said locks, or alter their location, if in their judgment the interest of the State will be promoted thereby; and the aggregate expense of reconstructing the necessary locks and putting said canal in navigable condition will not be increased thereby."

Under the provisions of the foregoing acts, the Commissioners believing the time had arrived when it was necessary to substitute new locks for the old locks, in July, 1848, directed Charles W. Wentz, a resident engineer in the employ of the State to make a survey and estimate of the cost of constructing the locks upon the plan prescribed by the Act, chap. 453, Laws of 1836, and also an estimate for constructing the locks of composite upon the plan contemplated by act, chap. 348, Laws of 1847.

By the report and estimate of the engineer, the aggregate cost of constructing the locks upon the plan prescribed by the act of 1836, was estimated at $188,769.64, and upon the composite plan prescribed by the act of 1847, the aggregate cost was estimated at $139,416.07, showing a difference in the aggregate in favor of the composite plan of $49,353.57.

In accordance with the provision in the act of 1847, the estimates of the engineer were submitted to the Canal Board, and on the 25th day of July, 1848, the following action was taken thereon by that Board.

"*Tuesday, July 25th*, 1848.

"Present, the Secretary of State, Comptroller, Treasurer, Attorney General, State Engineer and Surveyor, Commissioners Cook and Beach.

"The plans and estimates for substituting new locks for the old locks on the Cayuga and Seneca canal having been submitted to this board by the Canal Commissioners as required by the act, chap. 348, Laws of 1847, from which it appears that the cost of constructing all of said locks as required by chap. 453, Laws of 1836, is $188,769.64, and the cost of constructing said locks of composite, with cut stone wings, hollow quoins and recesses of the dimensions of the enlarged locks on the Erie Canal, is $139,416.07, therefore in conformity with the provisions of said act, chap. 348, Laws of 1847,

Resolved, That this board approves and recommends the construction of the composite lock of the same dimensions as the enlarged locks on the Erie canal."

Connections with the navigable waters to be discontinued.

This canal as now constructed is connected by a race at the foot of the upper lock in Seneca Falls, with the pond which supplies water to the mills of Dows and Cary, on the north side of the river, and Oatman and others on the south side; by this race, boats pass from the canal into the pond, and thus have access to the mills located upon it for loading and discharging freight. This connection, which is important to those mills, can only be sustained by constructing a lock of 4 feet lift, through which to pass boats from the canal to their race. If this plan should be adopted it would keep up the connection of the canal with the race and slip, and at the same time prevent drawing water from the canal for milling purposes; which, although an important consideration to the State, the Commissioners have no authority to construct a lock for such purpose.

CHANGES IN THE LOCATION OF LOCKS.

Lock No. 1, 1½ miles from Geneva is to be dispensed with under the act, chap. 313 Laws of 1844.

The lock at Chamberlain's between Waterloo and Seneca Falls, is to be dispensed with by raising the dam at Seneca Falls, and raising the towing path from the lock to Seneca Falls to correspond; for the estimated cost of this change, see estimates annexed.

The only additional change contemplated by the plan adopted, occurs at the upper lock at Seneca Falls, which is moved up the canal about 150 feet, in order to lengthen and improve the level below. This change is necessary and contemplated by both plans; no separate estimate of the cost consequent upon this change is made.

Act, chap. 213, Laws of 1849, provides as follows:

"§ 1. In rebuilding the locks on the Cayuga and Seneca canal, the canal Commissioners are hereby authorized, if they shall deem the interests of the State to require it, to separate this canal from Seneca river, and construct an independent channel for the same, from the head of lock number nine, below Seneca Falls, to the Montezuma level, crossing the Seneca river by an aqueduct, thereby dispensing with the rebuilding of three locks.

"§ 2. The expenses incurred under this act, shall be paid as directed by chapter three hundred and forty-eight, laws of one thousand eight hundred and forty-seven."

By the authority conveyed in the foregoing law, the Commissioners have directed the necessary surveys and estimates to be made, in order to ascertain the feasibility of the proposed improvement.

The length of this improvement is about 3½ miles, and the estimated cost of the work including the aqueduct over the Seneca river is $128,877.37.

The estimates are for a canal of the ordinary size, except the estimate for the aqueduct, which is intended to conform to the dimensions of the enlarged canal.

By this improvement, three locks are dispensed with, (No. 9, 10 and 11,) and about 3 miles of difficult slack water navigation.

The payments are made as directed by the act, chap. 348, Laws of 1847.

Statement showing the cost of work completed, also the estimated cost at contract prices of work now constructing, the amount paid, and remaining to be paid to complete the work.

No. of Lock.	Location	Estimated cost at contract prices.	Amount paid	Amount to be paid.
2, & 3.	Waterloo completed, ...	$36,853 88	$36,853 88	
5, 6 & 7.	Seneca Falls, constructing, ...	58,616 19	28,450 69	$30,165 50
		$95,470 07	$65,304 57	$30,165 50

Statement showing the estimated cost of rebuilding locks 8, 9, 10, 11 and 12, and raising the Seneca Falls dam, and the towing path, so as to dispense with the Chamberlain lock.

No. of Lock.	Location.	Estimated cost.	Amounts.
8.	First lock below Seneca Falls,...	$14,611 00	
9.	Second do do do ...	11,683 00	
10.	River crossing,................	11,424 00	
11.	do do	13,926 00	
12.	Cayuga Lake lock,............	14,659 00	
	Raising Seneca Falls dam, &c.,..	9,471 00	
		$75,774 00	
	Add for contingencies,..........	7,500 00	
			$83,274 00

LOCKS ON CHAMPLAIN CANAL.

No. of Lock.	Location.	Kind of Lock.	Condition.	Length from quoin to quoin.	Width in chamber.
No. 1, ...	Old Junction, ...	Lift Lock, ...	Old, ...	90	15
2, ...	" "	Lift "	"	90	15
3, ...	Mohawk river, sth side.	Guard "	Rebuilt, ...	100	15
4, ...	" " nth "	Guard "	Old, ...	90⅓	15
5, ...	1st above Waterford,	Lift "	Rebuilt in 1842, ...	100	16⅙
6, ...	2d " "	Lift "	" 1849, ...	100	15 10/12
7, ...	3d " "	Lift "	½ " 1844, ...	99	14 9/12
8, ...	Flynn, "	Lift "	" 1840, ...	99 7/12	15 10/12
9, ...	Hewitt, "	Lift "	Rebuilding, ...	100	15 10/12
10, ...	Becker's, "	Lift "	Rebuilt in 1847, ...	102⅓	13 9/12
11, ...	Saratoga dam, ...	Guard "	" 1834, ...	101	15⅙
12, ...	" "	Guard "	Partly rebuilt, ...	101¼	13⅓
13, ...	Bassitt's, ...	Lift "	Rebuilt in 1839, ...	101	15⅔
14, ...	Fort Miller, ...	Lift "	" 1842, ...	100	15½
15, ...	Moses' kill, ...	Lift "	" 1840, ...	101⅓	15⅔
16, ...	Fort Edward, ...	Lift "	" 1837, ...	100	15
17, ...	Fort Ann, ...	Lift "	" 1829, ...	101⅓	13⅔
18, ...	"	Lift "	" 1829, ...	101⅓	13⅔
19, ...	"	Lift "	" 1829, ...	101⅔	18⅔

LOCKS ON LAKE CHAMPLAIN.—(CONTINUED.)

No. of Locks.	Location.	Kind of Lock.	Condition.	Length from quoin to quoin.	Width in chamber.
20, ...	Parish Lock, ...	Lift Lock, ...	Rebuilt in 1837,...	100	15
21, ...	Wood Creek,........	Guard "	" 1845,...	100	15
22, ...	Whitehall,..........	Lift "	" 1829,...	100	13⅔
23, ...	"	Lift "	" 1829,...	100	13⅔
24, ...	"	Lift "	" 1829,...	100	13⅔
Waterford side cut.	Waterford,.........	....	....		
No. 1, ...	"	Lift "	Partly rebuilt,.....	98	14
2, ...	"	Lift "	" "	98	13 9/12
3, ...	"	Lift "	" "	98	13 9/12

N. B. The above measurements have been carefully made, and the dates of rebuilding the several locks ascertained as nearly as possible.

J. P. GOODSELL, *Engineer.*

CHEMUNG CANAL.

The work now in progress upon this canal, is by order of the Senate, in the hands of a select committee. It may therefor be considered improper to speak of it in this report.

All of which is respectfully submitted,

CHARLES COOK,
JACOB HINDS,
Canal Commissioners.

State of New-York.

No. 84.

IN SENATE, MARCH 20, 1850.

RESOLUTIONS

In relation to manorial titles.

[Offered by Mr. CARROLL.]

Whereas, The Supreme Court of the State of New-York, has made a decision that the reservations of quarter sales or fines of alienation, contained in the leases to many of the tenants upon certain manorial lands in this State, are illegal, and the amount of money collected without authority in such cases is represented to be very large:

And whereas, Great numbers of such tenants are praying the Legislature for relief, and it is important to a correct understanding and to proper action upon the subject, that reliable information should be had as to the extent of such payments; therefore,

Resolved, That a select committee be appointed, whose duty it shall be to inquire diligently into the amount of money paid by the tenants upon the manor of Rensselaerwick, the Livingston manor, and such other manor or manors as may be deemed proper points of inquiry, on account of quarter sales or other fines of alienation; that said committee have power to sit during the recess of the Senate, and to send for persons and papers; provided, said committee shall report to the Legislature, early in the next session, the result of its investigations; and also, upon the general condition of such manorial districts as it shall have occasion to visit; but said committee shall have no charges for expenses against the State.

LETTER.

Hon. Thomas B. Carroll, *Senator, &c.*:

Sir,—In accordance with a resolution passed at a mass meeting of tenants of the manor of Rensselaerwick, held March 10th, 1850, at West Sandlake, I have procured and now give you a few facts as it respects quarter sales and extra rents which have been paid to Van Rensselaer, on a few farms in district No. 1, West Sandlake, viz:

1st. On the farm of 196 acres, leased to William Martin, only of of which 98 acres are within my district, and which have been sold six times during the last sixty years, the principal and interest amount to $1,165.64.

2d. On a farm leased to William Goslin, of 150 acres, no quarter sale, but "extra rent" when sold, which has been sold but once, the principal and interest, up to the present time, amounts to $75.30.

3d. On a farm leased to Thomas Johnson, of 237 acres, in 1790, and sold three times up to 1800, (how much was exacted under the first two sales I am unable to say, but the records in the office of William P. Van Rensselaer will probably show,) but the sale made in 1800 cost seven bushels of wheat extra rent for every year thereafter, which has been paid, and the amount of principal and interest, up to the present time, is $12.89.

4th. On a farm leased to William Lappeas, which has been sold twice, the principal and interest of the quarter sales, up to the present time, amounts to $423. That part of the farm which has been sold, and on which the quarter sale has been exacted, is about 90 acres.

5th. On a farm leased to Adam Mott, in 1795, and formerly leased to some one else, to me unknown, Mott having taken a new lease and paid the quarter sale, the principal and interest amount, up to the present time, to $218.25.

6th. On a farm leased to Clapper, under a quarter sale, and sold three different times up to 1801, the exactions under the first two sales I am unable to ascertain, but in the third sale the quarter sale was paid, the principal and interest of which, up to this time, on about 80 acres, amount to $443.

7th. On a farm leased to William Howland, of 100 acres, under a quarter sale lease, and which has been sold five times, what was exacted the first two times I am unable to find out, but on the last three sales receipts are found, on which the principal and interest to the present time amount to $769.

8th. On a farm leased to William Hagerman, of 112 acres, which has been sold but once, the principal and interest of the quarter sale amount, to the present time, to $109.

9th. On a farm of 69 acres, leased to Amos and Enos Lovelin, one sale has been made, the principal and interest on which up to the present time amount to $528.

10th. On a farm of 69 acres, leased to Prince Howland, there have been *four* quarter sales paid, the amount of which, principal and interest, at the present time, is $417.30.

The whole number of acres in the above (in part) described farms is 1,190. The land is contiguous and has changed hands more rarely than other portions of the town.

The total amount paid for quarter sales and extra rents, on the above number of acres, including simple interest up to the present time, is $5,237.49.

You are at liberty to make such use of this statement, as you deem proper.

WM. CARMICHAEL.

West Sandlake, 19*th*, 1850.

State of New-York.

No. 85.

IN SENATE, MARCH 14, 1850.

REPORT.

Of the committee on claims upon petition of Josiah S. Kellogg.

Mr. Schoonmaker from the committee on claims to which was referred the Assembly bill entitled "An act to provide for the appraisal and payment of canal damages to Josiah S. Kellogg,"

REPORTS:

That the committee have had the same under consideration and have examined the report made by the committee of claims in the Assembly upon the introduction of said bill and have made such other examinations as time and circumstances have permitted; and your committee would state that they find that the papers on which such report, made to the Assembly and now before your committee, do apparently substantiate the facts alleged in such report, but they have also found in such papers and in Assembly document No. 33 of 1848, additional facts which have led your committee to a conclusion directly adverse to the prayer of the petitioner and the conclusions of said report accompanying such bill.

Your committee on such examination find the facts to be that the Chenango canal crosses the lands of Jacob Kellogg. That on the 4th day of September 1833, after the survey of the route of the canal, he, Jacob Kellogg, executed a release to the state in the following words: "Whereas the Canal Commissioners in surveying different routes for the Chenango canal pursuant to the act entitled "An act for the construction of the Chenango canal," passed February 23, 1833, have surveyed one route passing over the land and premises of the subscriber, now therefore, I, the subscriber, for the purpose of encouraging the construction of said canal *and as an inducement for determining on such route and termination of said canal as will pass over my said premises*, do hereby fully and absolutely release, acquit and discharge the people of the state of New-York of and from *all damages* which I may sustain or might claim in consequence of the construction of said canal, its feeders and their appendages on, over or through my lands and premises, and of and from *all claims* and demands for or on account of *any lands*, waters or streams that may be entered upon, taken or appropriated for the construction or use of the Chenango canal, its feeders and their appendages."

It is alleged in the petition and papers, that in the construction, the route of the canal was somewhat changed from the place at which it was originally staked, so as to take more land of the said Jacob Kellogg, and the canal bridge was located at a point varying considerably from that originally designed. That Jacob Kellogg was dissatisfied with this alleged change in the location, and expressed his dissatisfaction with it.

It appears further from public documents and the proceedings of the Canal Board and canal appraisers, that the said Jacob Kellogg in due time presented his claim for damages for such construction to the canal appraisers. They examined the claim and it was rejected. Mr. Kellogg then appealed to the Canal Board, and the decision of the appraisers was by them affirmed.

Here the claim appears to have rested during the life time of Mr. Jacob Kellogg, and such decisions were quietly submitted to by him. But since his death and some twelve or thirteen years after the occurrence of the injury, we find for the first time the claim revived by the executor of Mr. Jacob Kellogg, in an application made to the Legislature in January, 1848. The petition was introduced into the Assembly and unanimously reported against by the committee on claims. And now the claim is again brought before the Legislature, and the bill under consideration has passed the Assembly.

Your committee are of opinion from the preceding facts that the claim should not be allowed and the Assembly bill should not pass into a law—for many obvious reasons, among which are the following:

1. The claim having been adjudicated and passed upon by the appropriate tribunals, the decision should not be disturbed at this distance of time.

2. The release of Jacob Kellogg is full and ample, confining the State to no particular route, giving it a free passage over any portion of his lands, and releasing all damages of every kind and nature, and without any reservation or restriction. If it would be illegal and improper, as it undoubtedly would be to permit parol evidence to contradict and vary the terms of such release soon after the execution and during the life time of the grantor, it would be doubly so after this lapse of time to permit the executor of the grantor after his death to nullify a solemn, written and executed instrument by loose parol testimony and the uncertain recollection of witnesses.

Your committee therefore recommend that the bill be not passed into a law.

State of New-York.

No. 86.

IN SENATE, MARCH 20, 1850.

REPORT

Of the Canal Board in answer to a Resolution of the Senate.

CANAL DEPARTMENT,
Albany, March 13, 1850.

To THE PRESIDENT OF THE SENATE:

In answer to the following resolution:

"IN SENATE, *March* 11, 1850.

"*Resolved*, That the standing committee on claims be discharged from the further consideration of the petition of Jared B. Moss, and the papers accompanying the same, and that the same be referred to the Canal Board for adjustment, and that they report whether any, and if any, what legislative action is required to enable them to make such adjustment.

"By order,

"(Signed.) "W. H. BOGART, *Clerk.*"

The Canal Board

REPORT:

That on the 21st day of November, 1838, James Faulkner and Jared B. Moss entered into contract with the Canal Commissioners for the construction of section No. 93 of the enlargement of the Erie canal. That the work was suspended by act chap. 114, laws of 1842. From the book of estimates in the office of the Canal Commissioners, it appears that there is a balance due to the contractors; that this balance is for work done by the contractors after the suspension of the public works under the law of 1842 and for which it does not appear that they have been paid.

A final account for the work done under this contract, seems to have been made out by the engineer then in charge, but the work done by the contractors after the suspension does not appear to have been included in this final account.

At this late day, enquiry and investigation is necessary to a proper understanding of this claim.

The present law is sufficient to authorize the final settlement of this claim, and the work having been done previous to June 1, 1846, any balance that may be found due must be paid from the Sinking Fund applicable to the discharge of the canal debt as it existed on that day.

All which is respectfully submitted.

CHRISTOPHER MORGAN,
Secretary of State.
ALVAH HUNT,
Treasurer.
H. C. SEYMOUR,
State Eng'r and Surveyor.
WASHINGTON HUNT,
Comptroller.
CHARLES COOK,
Canal Com'r.
FREDERICK FOLLETT,
Canal Com'r.

State of New-York.

No. 87.

IN SENATE, MARCH 13, 1850.

TESTIMONY

Taken by the Railroad Committee in relation to bridging Lake Champlain.

In Senate, *March* 8, 1850.

Resolved, That the standing committee on railroads are hereby required and authorized, during the recess of the Legislature, to visit Rouse's point and such other places in the vicinity, as in their judgment may be necessary, in relation to bridging Lake Champlain at Rouse's point, and that the committee report to the Senate such portions of the testimony already taken by them, as in their judgment requires preservation.

In obedience to the foregoing resolution, Mr. Geddes, from the standing committee on railroads reports the following testimony:

Captain *Henry Tisdale*, sworn: Has navigated Lake Champlain since 1819, in all capacities, from cook to captain. As captain, from 1830, has passed Rouse's point six times a week for some years; the shores are low, and the winds blow hard, particularly the westerly and southerly; now vessels can pass at any time; if there was a draw-bridge, many times it would be impossible for vessels to pass, particulsaly in the night; could not pass a draw sixty or seventy feet wide with a head wind, without resorting to something besides sails; in strong side winds it would be difficult, but with gentle winds the passage might be made; sometimes there is a hard south wind for two or three days; south winds prevail in the spring; there is enough width and rake for the wind to throw up as much sea as the depth of the water will allow. A steamboat fifty-eight feet wide could not safely pass a 70 foot draw in a gale of wind. Has not been in the habit of passing draw-bridges, but has passed through narrow piers. Vessels are towed by steamboats, sometimes seventeen vessels in one tow—some abreast and some astern; such a tow would probably take half a day in passing through a bridge; a part of the vessels would necessarily be taken and moored in some safe place, and so on until all were through; this is true of good weather, in bad weather it could not be done at all. These vessels towed by steamboats do not generally carry chains and anchors; and in a gale of wind, if the tow was south of the bridge, it would be necessary to take it under the lee of some island; but if there was no bridge he would go on about three miles below the point to a good place for anchorage; if a steamboat was below the bridge with a large tow, and a heavy south, south-east or soath-west wind was blowing, it would endanger the tow; in not very bad weather it would be safe to moor at Rouse's point harbor. Commonly eight months navigation on Lake Champlain; of these eight months, two-thirds he calls boisterous; and the bridge would obstruct the navigation for one-half of this time; these tows are made up at St. Johns, and consist of vessels that stop at various places on the lake. Rafts commonly of 100,000 feet square timber, sometimes much larger, are towed through the lake; these rafts are from 100 to 125 feet wide; during the whole season, steamboats tow vessels, particularly during the night past this point. Large quantities of logs are floated in rafts from Canada, that are sawed at Plattsburgh and other places.

Cross-Examined: Has not navigated the lake since 1847; but is interested in vessels; (named some 7 or 8, and said he had interests in a number more.) These vessels run to St. Johns regularly; carry merchandise to St. Johns and return with grain, and various other products. There are other heavy lines that carry produce, (wheat particularly.). Canada steamers are used some to tow these vessels from Detroit to Burlington; thinks a barrel of flour can be carried through the St. Lawrence 25 cents less than by the New-York canals.

Captain Cyrus Boardman, sworn: Has been navigating Lake Champlain from a boy; has been master of a vessel since 1812, until within 4 or 5 years; is acquainted with the place where it is proposed to locate the bridge. At the place where the bridge is to be located, there is sometimes a very heavy sea; there being a rake of wind for 8 or 10 miles; has seen a sea that would lift a vessel, of 25 feet beam going through a narrow place to vary her from 20 to 50 feet, with all the help you could have, the sea lifting the vessel one way as it strikes her, and as it leaves her the vessel falls off the other way. The same effect would be had on a steamboat, not perhaps so great, but to some extent. At this place vessels beat against a head wind; a vessel coming up to the bridge, if she was warped through could not get away from the bridge, unless the piers run some 300 feet to windward. The channel that vessels usually navigate, just at the bridge, perhaps is half a mile wide; steamboats tow from 15 to 25 vessels at a time, up and down this river; in good weather it would probably be necessary to separate the tow; in a gale of wind it would not answer to attempt to pass the bridge. There are about 8 months of navigation, and one-half of this time the bridge would hinder towing boats; there is a small part of the time now that the weather does not allow navigation; but seldom more than a day at a time. It is his opinion that the bridge would obstruct navigation materially three-fourths of the time, and one-fourth entirely. The average time of a sail vessel from Whitehall to St. Johns, 150 miles, is about one week going and returning; thinks the bridge would make twice this time necessary.

Cross Examined: Is but little concerned in the navigation of the lake; has now no interest in vessels.

John Brown, Sworn: Is pilot of the steamboat United States of Burlington. Has been navigating Lake Champlain 25 years; is well acquainted with proposed location of the bridge at Rouse's point. Thinks the bridge would have a material effect upon sail vessels, making them shear from 20 to 50 feet in a hard wind; thinks that one half the time of navigation it would be very bad getting through the bridge; steamboats do not shear quite as much as sail vessels, say from 20 to 30 feet; the U. S. is 58½ feet wide over all as he has been told, and 250 feet long, drawing nearly six feet of water. In day trip never lay by there more than any where. The boats are advertised to leave St. Johns at 5 A. M., but do commonly leave as soon as the cars come in from Montreal, say from 6 to 9 o'clock at night; go up to

Rouse's point, and there stay until 6 the next morning; come up early in the night to avoid fogs, which generally come on in the morning; thinks in some parts of the season, (fall and spring) it would average two fogs a week. The place the steamboats stay over night, is above the place of the proposed bridge. You could not see a lamp the length of the boat in a heavy fog; has seen a very heavy sea at this point; this is where there is the heaviest sea of any place in the river; has been through the Troy draw bridge; has not had much experience in passing draw-bridges; says that in some bad weather it is safer to go down the river, than to stop at Rouse's point.

Cross-examined: The channel is narrower at the fort, but the narrow place is about four miles below the fort; the channel is, he thinks, less than a quarter of a mile wide at the fort, and then widens for about a mile; Bloody Island is about four miles lower down: runs this river nights, except in very foggy weather; about twice a week have fogs, when they have to feel their way along; never lost a trip; run up in the fore part of the night to avoid fogs; can run in dark nights if not foggy, however dark; vessels anchor in gales south of the bridge, and sometimes they part their cables.

Lott Chamberlain, sworn: Lives in Plattsburgh; agrees in the main with the witnesses sworn; is captain of propeller James H. Hooker, engaged in towing; in making up a tow, place three or four boats on a side and the rest astern; has been in the night on the river with such boats; in a gale of wind if there was a bridge it would be necessary to leave his tow; has passed this place in the night with fourteen boats; the bridge would be a great detention, even in a calm, still time, it would hinder three or four hours with a heavy tow; sail vessels of 300 tons navigate this lake; the common sized, is 200; has sailed such a vessel five or six years; last summer the schooner Gen. Moore parted her cables south of this place and had to run below Bloody Island before she could make a harbor.

Cross-examination: Thinks the bridge at St. Johns does raise the water in the lake, as last summer was was very dry, and still the lake did not fall very low, and the Canadian government caused the ice-breakers at that bridge to be taken up, as the farms along the river were injured by the water raised by the bridge.

H. G. Tisdale again: Owns the Gen. Moore, in part; the fore part of last season she came out of Seco bay loaded with lumber, and let go an anchor some 12 or 14 miles south of the proposed bridge, where she parted her cable, and was unable to make a harbor until she came to at Lacole, a mile below Bloody Island; if there had been a bridge, thinks that the vessel would have been lost. Vessels loaded with lumber have their loads so piled that they are 30 to 40 feet wide.

Cross-examined: Had there been a dock, it would not have been possible to have made her fast to the piers.

Murray Mandeville, sworn: Has been master of a sloop on Lake Champlain 13 years, and 9 years as a hand on that lake. Thinks a bridge would be very bad for navigation at any time. In a hard wind it would be difficult to go through a draw; it would be necessary to come to and drop an anchor in a favorable wind, but in a head wind it would be necessary to "heave" through. Sail vessels beat up and down the river. Some places it is difficult, owing to the narrowness of the channel. There is some current, and it would take from a quarter to a third longer to go south through the river than it would north. There is in a south-east wind a considerable of a swell at the place of the proposed bridge.

The river at the place where it is proposed to build the bridge is about half a mile wide. Rouse's point furnishes protection to vessels if the wind does not blow too hard. There would be times when vessels could not pass the bridge, say from one quarter to one-half the time. There is more sea room where the bridge is proposed to be built than there is below, and it is better beating; it would be dangerous to beat through a draw, and it would be necessary to heave through by an anchor ahead, which would take three or four hours, using two anchors, one to hold on by while the other was carried ahead.

Cross-examined: Ash Island is four or five miles below; at that point the navigable channel is from 10 to 15 rods wide, may be less. At Bloody Island about the same. Bloody is above Ash Island one-half a mile. From Ash Island to St. Johns, from 16 to 18 miles. At St. John's the navigable channel of the river is from 20 to 30 rods wide. There is a draw in the bridge at St. Johns, but the bridge is below the lake vessel navigation, but the canal boats go through the bridge; Canada barges and steam propellers go through the canal, and small steamboats. All the sloops stop at St. Johns—that is as far as he ever went with a sloop. When there is a strong south wind in very low water, cannot beat up the river. Low water in June, July and August, sometimes in September the water is low; water raises sometimes in August, but not often, commonly about the twentieth of September; during high water the wind sometimes blows so hard from the south that vessels cannot beat up the river. When it is foggy or dark do not attempt to beat up the river; but above Bloody Island the river is wider. Very often start from St. Johns with sail vessels and go up the river in the night; but do not do so in a south wind. Never knew of any vessels having been lost, but has known them driven ashore in the river, sometimes from one cause, sometimes from another; do not go ashore oftener in the river than at other places on the lake; about 12 miles at the south end of lake is about as bad as the river, the channel being from 10 to 15 rods wide. At the elbow the channel is from 6 to 10 rods wide—thinks nearer 6 than 10.

Whenever sail can be carried, except in low water, can beat up the river. Sometimes get ashore on the flats when the water is shallow. Steamboats in passing the elbow, near Whitehall, use a line and are delayed from ¼ to ½ an hour.

Josiah Bascom, sworn: Has been master of a vessel on Lake Champlain for 25 years most of the time. Is acquainted with the place where it is proposed to build the bridge; the bridge would affect navigation particularly in the night; the lake is narrow and low lands all around; in high winds it would be difficult to get through; about the time the cars were expected the bridge would not be opened. The west shore of the lake has a "bight" or bay, and about 3 or 4 miles to the south a point projects into the lake; but the water is so shallow that vessels cannot take refuge under it. The east shore has Windmill point 1½ miles south; but makes no harbor from south winds, because of the shallow water. There is no good harbor below Isle La Mott, which is about ten miles above the bridge. In a gale of wind from the south, vessels that are below Isle La Mott run for the river when anchors will not hold; does not know of any particular vessel being driven into the river; vessels do not often get driven ashore. Has himself been only twice driven ashore; has not lost a vessel. Thinks a well managed drawbridge would be quite an obstruction to the navigation; some seasons the effect would be more and some less; but would be a great hindrance.

Cross-examined: If there was a steamboat furnished to draw vessels through, it would be still a hindrance. In going down before a heavy wind it would be a job to "get the boom in" while passing the bridge. Blows so hard sometimes that you could not make fast a vessel to a pier; in some winds might go on if there was no bridge, when it would be difficult to get through a draw. Is acquainted with drawbridges; one across the Richelieu river, 9 miles below Chamblee; sail vessels pass it; the bridge is quite a detention; all vessels from Montreal to St. Johns pass it; the river is at that place ½ a mile wide; the navigable channel is 8 or 10 rods wide. In a light wind going up stream, vessels cannot get through without assistance, but in a strong, favorable wind they get through. Going down with a fair wind vessels take in all sail to avoid hitting the bridge. There is but little sea running there, none to hurt anything, while at Rouse's point there is a heavy sea sometimes. There is no tide; the current of the water varies with the wind. The draw is kept open except when the cars are expected; but for 15 minutes before the cars are expected the bridge is kept closed, in which case the vessels anchor. There is but little docking above the bridge, say 50 feet, below say 30 feet. The piers are from 40 to 50 feet apart. There are draws over the canal, they do not hinder much, as the boat is towed through the canal. If there was a dock 600 feet long on each side of the draw, well furnished with fender posts and fasts, it would not be safe to try to pass.

Benjamin Jones, sworn: Lives at Whitehall; is pilot of the steamer Ethan Allen; has been engaged in towing vessels and rafts up the Richelieu river,—127,000 feet square timber at one tow, and has towed 18 vessels at one time. The rafts are generally 80 feet or thereabouts wide; a bridge would be very much in the way; the further end of the rafts are nearly ½ a mile distant from the boat, there being about 500 feet between the steamer and the forward end of the raft; this is because the rafts and vessel are more manageable in this form; does not think a steamboat could pull a raft through a bridge in a west or south-east wind. Often at evening after the wind has been blowing fresh all day lengthwise of the lake, there will be a wind from off one of the shores. *Rafts to be safe going through the lake must be wide—wide in proportion to their length and quantity of lumber in them—from four to six cribs abreast.* With a raft made up narrow enough to pass the bridge, such would be its length that in common weather, not one time in fifty but that its swinging would hit the pier; before a hard wind a raft will crook up, and cannot be kept straight, though it may be safe to navigate with one in such times; must have a half a mile to handle a raft in, and in a strong gale of wind in approaching the bridge, if the wind was aft, it would be necessary to fasten to the hind end of the raft and hold on until the wind was over; there has been a good deal of timber lost in the lake by rafts breaking up in a wind. A long tow of vessels is worse than a raft, as the vessels swing more than rafts, and going before the wind it would be very difficult to manage them through the bridge; thinks that $\frac{2}{3}$ of the sail vessels that trade with Canada are towed up to the lake by steamers. There are four steamers used for towing and freight, besides perhaps a dozen small Canada steamboats engaged in towing, and some propellors from Chicago. The passage steamboats very commonly tow boats; thinks he has been aboard sloops at the place of the proposed bridge when a sea would throw them from their course 30 feet.

Cross-examined: Lumber from Canada is over half of it sawed; about 15 very large rafts came out of St. Johns last year of square timber, and quite a number of rafts of saw logs; the square timber would average perhaps 100,000 feet to the raft; has never had any experience in using a draw-bridge. The channel for about 12 miles near Whitehall is about 15 rods wide and some places for two miles is direct, and sometimes in towing vessels in this channel, they go ashore, though there is no sea running; for forty miles from Whitehall there is but little sea.

Oscar F. Blount, sworn: Lives at Whitehall; is one of the owners of steamboats on Lake Champlain; is well acquainted with the proposed location of the bridge, and thinks it would make the navigation still more difficult and hazardous. There has been an enormous increase in the business on the lake for the past year. In the Champlain district, the office of which is at Rouse's Point, 543 vessels were cleared in about two months of navigation; this was one side of the lake, and thinks there were nearly as many on the other. Says the *increase* of business will, he thinks, be as great next year as it was the last; thinks there were 2,000 passages last year, in 200 days, besides steamboats and tows—perhaps 1,600 passages of these. The sending of lumber from Canada is greatly on the increase, now coming for 120 miles above Montreal. The increase in grain and flour is as great as in lumber; Canada flour is sent in bond to England by way of New-York. Flour and wheat can be carried to the shores of Lake Champlain cheaper (wheat 10 cts. a bushel) by the Canada canals than by way of Albany, (flour 15 cts. a bbl.)

Henry Smauley, sworn: Lives at Troy; is acquainted with the draw-bridge at Troy; makes it difficult to get through; has seen vessels foul of the bridge going both ways. Before the bridge was made more vessels went above that place than now; horses are use to tow through, and men are employed to help haul; the boom has to be hauled aft to enable the vessel to pass. The wharves above are not so much used as they were before the bridge was made; the falling off of business is very striking; there is ¼ of a mile of docks above the bridge; has navigated the Hudson river from a boy; has seen draw-bridges in New Jersey, but never passed them.

Marvin Porter, sworn: Is a civil engineer, having been some fifteen years in the business in constructing railroads and canals. Has, until recently, had charge of the eastern division of the Rutland and Burlington railroad; has visited Rouse's Point, with a view to examine whether a bridge would have the effect of raising the water in the Lake. He came to the opinion that no sufficient examinations had been made as to the rate of the current of the water to form a safe opinion, but he thinks that the bridge would have the effect to raise the water. Had before him the comparative areas of cross sections at various points on the river, but nothing was known as to the rate of the current and that is a material point to be known, in order to settle the question. The width of the river at Rouse's Point is about 5,000 feet. The country is low and flat at Rouse's Point, vanishing off to the water, mostly earth, but some rock; no bluffs to break off the wind; thinks a bridge would endanger navigation in a storm, and would materially injure the navigation of the lake; is acquainted with the draw bridges in Boston harbor; vessels are warped through, and has never seen one going through under sail, but has seen them warped through. The widest draw that he knows of is 70 feet and is in the Albany Basin bridge; the Boston bridges have draws of from 56 to 60 feet; thinks the widest of them is 58 feet. There is not in the Boston bridges the same exposure to the winds and waves, that there is at Rouse's Point; is of the opinion that the water is too deep at Rouse's Point for the formation of bars; does not think that the little that the bridge would probably raise the lake would be of any material injury.

The following table has been compiled from the Custom House returns, as showing the business in part, of Lake Champlain for the years 1848, and 1849.

Comparative statement of the value of articles imported and entered at the two Custom houses on Lake Champlain, for the years 1848 and 1849, and the amount of duties received for the same period.

	Value in 1848.	Value in 1849.	Duties in 1848.	Duties in 1849.
District of Vermont, including $166,413 of bullion,...	$303,396 00	$243,568	$24,115 72	$47,510 89
District of Champlain,......	67,203 30	373,848	16,403 55	51,918 04
Value of goods entered for warehousing and transported to other districts, (Vermont district,)............		182,778		
Comparative statement of the value of goods imported and entered, at the Custom house St. Johns, Canada for the years 1848 and 1849, and amount of duties received.				
Custom house St. Johns, ...	$1,321,151 47	$1,480,168 87	$160,573 85	$186,459 97
Comparative statemnet of the value of articles exported from the Custom house at St. Johns Canada, for the years 1848 and 1849.				
Custom house St. Johns, ...	$436,454 87	$1,175,292 73		
Number of vessels in and out of St. Johns, Canada for the years 1848 and 1849.			Tonnage.	Tonnage.
	$884 00	2,073 00	157,069	208,383

Amount of tonnage entered and cleared, at the port of Champlain from and to Canada East, 1849.

American vessels entered, 93,399; Foreign vessels entered, 16,343. Total tonnage entered, 109,742.

American vessels cleared, 93,860. Foreign vessels cleared, 16,443; Total tonnage cleared, 110,303; Total 220,045.

Amount of vessels cleared and entered at the Champlain district, from Oct. 1, 1849, to Dec. 10, 1849. British 275; American, 259; Total 534.

Number of vessels entered and cleared at Vermont district for the same time, from Oct. 1, 1849, to Dec. 10, 1849: Entered 108; Cleared 65; Total 173.

State of New-York.

No. 88.

IN SENATE, MARCH 21, 1850.

REPORT

Of the Canal Commissioners in answer to resolution relative to projected plans of enlargement of canals, other than the Erie Canal.

To the President of the Senate :

In compliance with the following resolution,

"In Senate,
"*February* 12, 1850.

"*Resolved*, That the Canal Commissioners be requested to report to the Senate the plan or plans projected or adopted since the 1st of January, 1848, for the enlargement of any of the State canals, other than the Erie canal; or, of any channel, section or portion of the same now or hereafter to be connected therewith; whether by said plan or plans connections with other navigable waters are to be discontinued, and to what extent; the location, length and cost, or estimated cost of each portion now under contract; the amount done and remaining to be done; the law by which authorized; and the fund out of which the cost of each is payable; also a description of the plan and estimates of the cost of rebuilding the several locks, except on the Erie canal, now under contract, of the original and of the enlarged size; the changes, if any, in their location, the cost of bringing them into use, resulting from such changes; the authority for the same, and the fund from which the cost is payable.

"By order,
(Signed,) "W. H. BOGART,
"*Clerk.*"

The undersigned, one of the Canal Commissioners of this State, having had under consideration the resolution of the Senate above recited, and having seen the report of the majority of the Board of Canal Commissioners thereon, begs leave to dissent from said report, and to submit the following as the report of a minority of said Board of Canal Commissioners.

The undersigned has no means of ascertaining the amount, kind or quality of work finished, in progress, or under contract, on the Chemung, Cayuga and Seneca, and Oswego canals; nor the estimated cost thereof, and is therefore unable to say whether the statement in said majority report on those subjects are true, and present to the Senate a fair and faithful exhibit of the extent of the aggressions on the guarantees of the constitution, or not. If the estimated amounts fall as far short of the actual cost as the past history of engineering in this State would authorize us to suppose, then we may safely double the figures of the majority report as the probable amount of the expenditures which will be required to complete the works now in progress of construction on said lateral canals. I shall not trouble the Senate with any unnecessary speculations, with regard to the propriety of commencing these works under proper circumstances; nor with regard to the economy manifested in their progress thus far; nor should I have troubled the Senate at all with any report on the subject, did I not believe that a great principle is involved in the legislation of the past two or three years, and the acts of the Commissioners under it, tending to the establishment of a policy which I deem highly reprehensible, to call it by no harsher name, and against which I feel bound to enter my solemn protest.

It is this: is there power in the Legislature, or the Canal Commissioners, to apply a dollar of the canal revenue to the enlargement of any work not specifically provided for in the Constitution, until the guarantees of the Constitution to the public creditors are fully met and satisfied? Another change of canal policy is also involved in the action of the Canal Commissioners, of serious moment, although it is of secondary consideration to the great question of constitutional power.

It has, until within a few years, been the settled policy of the State, as a matter of economy and interest, to avail itself of the natural advantages of river navigation, wherever such advantages existed and might be improved by the State, as in the case of the Tonnawanda, the Seneca, the Oswego, the Chemung and the Hudson rivers. Experience has demonstrated that river navigation, in connection with the canals, is a cheap, economical, safe and useful navigation; and after the lapse of a quarter of a century it is too late to urge that it is so useless, expensive or difficult, as to authorize a deeply indebted State to overleap all constitutional restraints to remedy the evil. The policy now in vogue seems to be to cut loose from the streams heretofore employed as a part of the canals, to throw away the money expended in their improvement, and to dig new channels on the enlarged plan along their margin at a great expense, and, in my opinion, without any justification whatever for the change. This change has been made at Havana, and, as I think, without the slightest necessity for it; along the Seneca river, where I have been unable to discover any improvemeni was needed, except the rebuilding of a few locks; and at Oswego, where a half a million of money will be squandered in what are called *improvements*, which, from the limited knwledge I have in the matter, are as uncalled for as would be a ship canal along Long Island Sound. Some of the locks on the Oswego canal undoubtedly required to be rebuilt; and I do not question the propriety of rebuilding them on the enlarged plan, at all events, until the $100,000 appropriated to said canal should be exhausted in providing for the increased expense of the enlarged locks, beyond the cost of those of the old plan. This money, judiciously expended, would, in my humble opinion, have met all the wants of that canal until the time when the completion of the works provided for in the Constitution would have left the canal revenues free, to be applied to the entire enlargement of the Oswego canal. I also enter my protest against this new, and in my judgment, wasteful and profligate policy.

The serious question, however, is that of constitutional power; and I must be pardoned for devoting a brief space of time to the examination of this question, in order that my position as an officer of the State having charge of canals, may be clearly understood. If I remained silent, my silence might well be construed into my approval of what I deem to be wholly indefensible.

The provisions of the Constitution are clear, direct, and imperative. A mind not distorted by interest or hostility to the government of the State, and the will of the people, can see distinctly the path of duty which it marks out; and seeing this, its commands ought, and should be obeyed. It is no answer, morally or legally, to say that the 7th article is no part of the Constitution. That ground has been taken in high places; and what was understood to be the mandate of an administration, may have materially influenced the conduct, if not judgment, of a partizan Legislature. But I can never subscribe to the doctrine that I am at liberty, either as a citizen, or an officer, to regard such portions of the fundamental law, as I may find an obstacle to my individual projects, as no part of the paramount law of the land, or to speculate on the probability of its adoption if it had stood alone, or a salvo to a foregone conclusion to disregard it.

The first section of the seventh article of the Constitution, declares that "after paying the expenses of collection, superintendence and *ordinary repairs*, there *shall* be appropriated and set apart in each fiscal year, out of the revenues of the *State canals*, $1,300,000," &c., until the debt, called the canal debt, shall be wholly paid. The second section sets apart $350,000 out of the surplus revenues of the State canals for the payment of the General Fund debt. The third section is in these words: "After paying the *said* expenses of superintendence and repairs of the canals, and the sums appropriated by the first and second sections of this article, there shall be paid out of the *surplus revenues of the canal* to the Treasury of the State on or before the thirtieth day of September in each year, for the use and benefit of the General Fund, such sum not exceeding $200,000 as may be required to defray the necessary expenses of the State, and the *remainder of the revenues of the said canals shall*, in each fiscal year, be applied in such manner as the Legislature shall direct, *to the completion of the Erie canal enlargement and the Genesee Valley and Black River canals, until the said canals shall be completed.*"

It will be seen by an examination of these sections that the *whole* of the revenues of the State canals are from year to year specifically appropriated by the constitution, and in this order of priority: 1st. To the expenses of collection, superintendence, *and ordinary repairs.* 2d. $1,300,000 as a Sinking Fund to pay the debt known as the canal debt. 3d. $350,000 as a Sinking Fund to pay the General Fund debt. 4th. A sum not exceeding $200,000 to aid the General Fund in defraying the expenses of government. And 5th. *All the remainder* to the completion of the *Erie* enlargement, the Genesee Valley and Black River canals—"*until the said canals shall be completed.*" This order of priority, and the true signification of the term "*ordinary repairs*," has become exceedingly interesting, if not important. Modern ingenuity, it is true, has discovered that *ordinary repairs* is a convertible term, and may by a little legislative *legerdemain*, be made to signify the enlargement of the lateral canals, and embellishing them with costly and magnificent bays, basins, and aqueducts—the constructing of new canals where none have heretofore existed—the changing the routes of the old lateral canals, and in short the entire engulphing, in the lateral canals, the *remainder*, which the people in adopting the Constitution, vainly supposed they had sacredly pledged to the completion of the works which had been authorized by law, begun, and abandoned for want of funds.

Let us examine this modern doctrine a little farther. If the term, "*ordinary repairs*," can by possibility be tortured into an authority for enlarging a lock, or a rod of the *lateral canals*, what shall prevent a similar construction in favor of enlargement on the *Erie canal*? Enlargement means the same thing, as I understand it, on the Erie, Chemung, or the Oswego canals. It will be borne in mind that "*ordinary repairs*" has priority of all the constitutional appropriations of the canal revenues. If the term, "*ordinary repairs*," is so elastic as be stretched over every species of enlargement, what becomes of the several Sinking Funds? Why not finish the Erie enlargement, and the Genesee Valley and Black River canals before applying a dollar to the payment of the public debts? All that is required to accomplish it is a poetical flourish, at the end of the act authorising it, thus, "and the expenses thereof shall be charged to *ordinary repairs.*"

Who cannot discover the utter fallacy of this abominable doctrine? Ordinary repairs has heretofore had a definite, well understood meaning, and was first as distinctive a term as *construction*, or Erie enlargement, until locality, and private cupidity laid their unholy hands on the Constitution, and scattered its sacred guarantees to the four winds of heaven. The majority, it seems, rely on on a statute passed in 1836, to justify the enlargement of the *locks* on the Cayuga and Seneca canal. Surely the majority must know, that if that statute is inconsistent with the provisions of a Constitution adopted since its passage, it is abrogated. It has become impossible to carry it into effect, and it has therefore ceased to be a valid or binding law, and it is so expressly declared in the 17th section of the first article of the Constitution of 1846. That act was *abrogated* by the Constitution, and cannot justify a diversion of the canal revenunes to objects prohibited by that Constitution. The act of authorising the extension of the Chemung canal, and appropriating a portion of the canal revenues under the very convenient misnomer of "*ordinary repairs*" to that object, was in my opinion clearly unconstitutional, and was a dead letter the moment it had passed through *the forms* of legislation, and should not, therefore, have been carried into effect. Much has been said of the acts and doings of officers of the state under what is claimed as authority granted by this statute. But as it is probable that all these matters will come up for investigation before a committee appointed by one branch of the Legislature of this State, I do not feel myself at liberty to refer more particularly to the acts of individuals; for I would by no means make myself obnoxious to the charge of wantonly or untimely assailing, or seeking to prejudice the position of any man. I am free to admit, however, that with my present understanding of that great and paramount law of the State, (the Constitution,) I should have felt myself at liberty to disregard the law in question, and by so doing have brought the statute, or my acts under or in regard to it, to the decision of the proper legal tribunal.

The act of 1849, authorising the enlargement of the locks on the Oswego canal, under one of the multiform aspects of "*ordinary repairs*," is equally unconstitutional. The law, too, waiving this objection, only authorises a change of the *location* of the locks, and the necessary section work to bring them into use. Now it appears that an entirely independent line of canal has been projected, and the old works of the state entirely abandoned, so far as the slack water navigation is concerned. This, I insist, is not contemplated by the statute, although it is drawn with consummate skill and ingenuity. If this plan of separating the canal from the river is carried out, I do not hesitate to predict that $2,000,000 of the canal revenues will be buried in the *new line*, under the convenient head of "ordinary repairs!" In my judgment it is not advisable that this separation should take place.

If my views of the Constitution are correct, then these lateral works must stop where they are. It is no more competent for this Legislature to *continue* an unconstitutional work, than it was for the last Legislature to *commence* it. Not a dollar of canal revenues can be appropriated to this object without doing violence to the plainest and most sacred pledges of the Constitution ; nor can they be resumed until "the Erie enlargement, the Genesee Valley and Black river canals are completed."

It is signally unfortunate that the expressed will of the people should not have been obeyed. Daily loud complaints are uttered, because the capacity of the Erie canal is not adequate to the demands of a rapidly growing commerce. Portions of it are enlarged while other portions are not, opposing serious obstacles to its usefulness. It is the aorta of the canal system, bearing the lifeblood of commerce from its most distant ramifications through its now impeded channels, and it can ill bear the gross robbery of the aliment upon which it had a constitutional right to depend for an increase of its capacity. It is idle to say that the Chemung, or Cayuga or Seneca canals were not fully adequate to all the demands of commerce upon them. Their enlargement was not needed, and it was unconstitutional to do so. The Oswego would have been content with enlarged locks, and the $100,000 would have secured this improvement. All beyond this, in my estimation, was wrong.

It remains to be seen whether farther provision for these works is to be made, under the specious cover of "*ordinary repairs.*" If such shall be result, I shall have the proud satisfaction of knowing that my earnest protest is recorded against it.

Respectfully submitted.

FREDERICK FOLLETT.

State of New-York.

No. 89.

IN SENATE, MAR. 19, 1850.

REPORT

Of the Trustees of the United Society of Shakers in the town of New Lebanon, Columbia Co., N. Y.

In view of complying with the resolution of the Honorable Senate, passed February 8th, 1850, we, the trustees of the temporalities of the United Society of Shakers of New Lebanon, Columbia county,

RESPECTFULLY REPORT:

In answer to section 1.

The real estate belonging to this society on the 15th of April, 1839, was, according to the assessors' returns, as follows, viz: (2,292¼) two thousand two hundred ninety-two and one quarter acres; value, including buildings, ($68,225) sixty-eight thousand two hundred twenty-five dollars.

The number and size of our buildings at that time:

One meeting house of wood 80 × 65 feet, with a porch 35 × 27.
Nine dwelling houses of wood, 2 stories, averaging 56 × 35.
Two school houses, do do one 36 × 28, one 34 × 24.
One office for trustees and store, brick, 2 stories, 80 × 40 and basement.
One do wood, 1½ do 30 × 24.
One work shop, stone, 3 stories, 70 × 40.
One do do 2 do 56 × 30.
One do brick, 3 do 70 × 40.

One work shop, brick, } 2 stories, and for storage, av'age size 47×27.
Eighteen do wood, }
One do do 3 do 65×38, dairy, &c.
One do do 2 do 40×30, spin.
Two do do 2 do 37×28.
Two do do 2 do 30×28.
One do do 2 do 28×28 and for storage.
One tannery, wood, 2 do 84×46.
One grist mill, stone, 2 do 50×35.
Six saw mills, wood, average 45×25.
One carding house, wood, 2 stories, 40×30.
One clothier's shop, do 2 do 38×28.
One blacksmith's shop, stone, } about 28×25.
One do do wood, }
One granary, wood, 2 stories, 50×38.
One do do 2 do 40×25.
One do and cider mill, wood, 2 stories, 50×46.
One garden house, do 2 do 36×30.
Seven barns, wood, averaging, 70×35.
One do 70×52.
One do 60×50.
Two do 60×40.
Three do 50×40.
Three do 40×30.
One do 36×28.
Four do averaging, 36×24.
One cow barn, wood, 80×30.
One do 40×20.
One barn and shed, wood, 90×30.
One wash house, wood, 24×20.
One carriage shed, wood, 30×20.
One wagon do 100×22.
Eight wood do average size, 48×25.
Two do do 50×24.
Two do do 30×20.
One teazle do 40×30.
Three do for farming tools.
One do 60×28.
One do 80×50.

Twenty out buildings of wood, of various sizes for storage and different purposes.

N. B.—A number of the minor buildings have since been altered and some taken down since 1839, so that we have only stated the particulars according to the best of our knowledge. The buildings erected on our premises since 1839 are occupied exclusively by the society for domestic purposes. And all the RENT we receive is for those on out-lands and does not exceed 75 dollars per annum.

SECTION 2.

Real estate purchased in the State of New-York since the 15th of April, 1839, with the cost, number of buildings, &c.

Tract No. 1.	1839.	Bought of John Campbell, 111 acres, laying in the town of New Lebanon, cost, ...	$4,350 00
No. 2.	1842.	Bought of George and Hiram Spencer, laying in the town of New Lebanon, 39¾ acre, cost.	2,100 00
No. 3.	1843.	Bought of Ira Sherman, 14 acres, in New Lebanon, cost, ...	354 00
No. 4.	1843.	Bought of Samuel Curtis, supposed about 60 acres, laying in the town of Canaan, cost, ...	800 00
No. 5.	1835.	Bought of Ashel Royce, 125 acres, laying in the town of New Lebanon, cost, ...	4,600 00
No. 6.	1847.	Bought of John Murdock, 38 acres, in New Lebanon, cost, ...	2,400 00
No. 7.	1849.	Bought of E. & G. Hubbard, 7 acres, in New Lebanon, cost, ...	420 00
No. 8.	1846.	Bought of Cushman Polly, 10 acres, laying in the town of Canaan, near Whiting's pond, cost, ...	250 00
No. 9.	1847.	Bought of Allen Main, 107 acres, in Canaan, cost, ...	1,700 00
No. 10.	1847.	Bought of Silas Churchill, 14 acres, in Canaan, cost, ...	187 00

No. 11.	1846.	Bought of John Sidle, 50 acres, in Canaan, cost, ...	600 00
No. 12.	1848.	Bought of Julius Hitchcock, 17 acres, in Canaan, cost, ...	300 00
No. 13.	1848.	Bought of Dr. Reed, of Pitsfield, 40 acres, in Canaan, cost, ...	567 00
No. 14.	1849.	Bought of the heirs of Elam Tilden, 122 acres, in Canaan, adjoining the State line of Massachusetts, cost, ..	1,000 00
			$19,628 00

Buildings on said lands when purchased, and those since erected thereon, with their cost.

Tract No. 1. When purchased, 1 dwelling house, 2 barns, 1 chaise house.
Moved on one old barn, value about $200 00
The repairs about equal to natural decay.
No. 2. One barn, one shed, no permanent building erected.
No. 3. No building when bought, none erected since.
No. 4. No building when bought, none erected since.
No. 5. One dwelling, two and a half barns, one cider mill when bought, none since erected, no repairs made.
No. 6. One small dwelling house when bought, no building erected.
No. 7. No building when bought, none since erected.
No. 8. No building when bought, none since erected.
No. 9. One dwelling house and barn when bought, no permanent building erected.
No. 10. No building when bought, none since erected.
No. 11. do do
No. 12. do do
No. 13. do do
No. 14. do do

SECTION 3.

Real estate sold since the 15*th of April* 1839, *to whom sold or conveyed, and the price or consideration received for each separate tract.*

In 1841.	One tract of about 3 acres, comprising an orchard and valuable piece of garden ground to Julius Hitchcock, laying in Canaan, for,.	$360 00
1840.	One tract of about 14 acres laying in Canaan, to A. Main, for,......................	200 00
1839.	One tract to Allen Spencer, about 3 acres, in New Lebanon, for,....................	90 00
Also sold mostly off the above mentioned purchased lands wood and timber for railroad companies,..		1,700 00
		$2,350 00

Thus it appears that the amount paid for land purchased since the 15th day of April 1839, is, ...	$19,628 00
And sold, as above,................................	2,350 00
Nett addition,................................	$17,278 00

Note. Our lands have been purchased from time to time, as the Society became able from their earnings and saving, in view of growing grain and other agricultural produce, for their own consumption.

But as yet, the lands owned by the society, are not of sufficient quantity and quality as to enable us to obtain from them sufficient grain and animals for that purpose, and considerable sums are annually paid for flour and grain of different kinds for our domestic wants. Consequently the money paid for said lands, we consider as recognized by the trust act as necessary expenditure.

SECTION 4.

In respect to the requisition contained in this section, your respondents beg leave most respectfully to remark, that a strict compliance therewith is felt after due consideration to be utterly beyond our ability to perform. But should your honorable body deem its fulfilment essential to the interest and welfare of the State, that "*the value of all our personal property, of every description, now owned or possessed by or for the society*," should be inventoried, and the amount reported to the Senate, and they will appoint a committee whose abilities are equal to the task, we shall feel ourselves in duty bound to render them all the assistance, which, in the prosecution of their intricate labors may appear to be reasonable and just. As by the resolution of the Senate, no inventory of our personal property, or any account of sales arising from manufactures or other article of produce in 1839, is required, your respondents cannot comprehend the relation this section has to the object contemplated, or what a compliance therewith (were it possible) could benefit the interest of the State, "*in pursuance of the Trust Act of* 1839," or how by this mode of proceeding can be shown the difference between the amount of property *then* held by the society, and what they *now* have in possession. In accordance, however, with what might be deemed reasonable in the above requisition, we will make for the consideration of the honorable Senate the following statement respecting our personal property, and the domestic arrangements and economy of the society.

Firstly. We would remark that the live stock owned by the society, consisting of horses, sheep and cattle, are deemed to be only sufficient for the necessary supply of teams, animal food, butter, cheese, wool, &c., for the society's consumption, and would probably amount to no more at present than in 1839. And though occasionally some may be sold, yet in the aggregate, the amount arising from such sales would not exceed the monies paid out for purchases of the like.

Secondly. Our dwelling houses, the number and sizes of which are given above, though large, are built and furnished in the most plain and simple style; and while all unnecessary and superfluous articles of furniture are avoided, the actual cost of furnishing one of our dwellings for the comfortable accommodation of 60 or 70 inmates would fall far short of the sum often expended in furnishing some single parlors in the cities of New-York and Albany.

Thirdly. Our shops are fitted up only with the necessary conveniences and tools to carry on several branches of mechanical trades. Our implements for farming and gardening are mostly of the kinds in common use, and only such as are necessary for these branches of business.

SECTION 5.

Of monies on hand or upon deposite with incorporated companies, banks or individuals, ...	$3,000
Of Government stocks, stocks of banks, or other incorporated companies, 24 shares in the Rensselaer and Columbia turnpike company, value	100
Of bonds and mortgages, ...	5,600
Of railroad bonds, ...	4,000
Of notes of hand and evidences of indebtedness, ...	1,054
	*$13,754

Note. It may be proper here to remark, that there may be deposits made, and evidences of debt, held by members of our society, which form no part of the consecrated interest of the Institution; consequently is not held in trust for the society by the Trustees. The regulation and constitution of the junior order or portion of the society being such, that it is optional with members of this order or portion of the society, to dedicate their property or not, just as they choose. (See Brief Exposition, page 11.)

* How much this sum of $13,754 exceeds sums of money we had in possession on the 15th of April 1839, we cannot precisely state; but from the best means we have for ascertaining, it probably must be about $2,000.

SECTION 6.

The aggregate amount of all monies or other property received since the first of February, 1849, for the sale of property of all kinds and the aggregate amount of all monies and property paid out since that period.

Amount of sales for the above time,	$38,405 35
Amount of money and other property expended	37,810 07
Balance,	$595 28

The above account includes all raw materials for manufacturing, as well as articles for building, improvements and repairs, for clothing, provisions &c. for home consumption. Also all sums received for the sale of articles raised and made for market, according to the best of our knowledge and belief and as appears by our books of accounts.

If to any it should appear strange, that a society of 5 to 600 people should not be able under ordinary circumstances to increase their yearly income beyond the statements given in this report, we would just call the attention of such to the following considerations.

Firstly, That the faith and principles of the society forbid its members from going into speculation, and tolerate only such branches of industry as are useful to the public, instead of those which tend to superfluity and extravagance, though generally the latter yields vastly the most profit to the manufacturers.

Secondly. It may be understood that the society not only supports its own poor, and bears its equal share of maintaining the county poor besides, but is also daily in the practice of extending such other deeds of charity to our fellow men, the yearly amount of which would be more than $2,000. We do not say this to trumpet our deeds of charity, but the occasion seems to demand of us a clear and explicit statement of the general system and economy practised by the society for the better understanding of the Honorable Senate.

SECTION 7

Of all sums of money and other property expended since the 1st day of February 1849, in buildings and permanent erections upon the real estate of the society.

One wood and dye house of wood, 70+22.
One saw mill of wood, 42+25.
One dry house of stone, 30+22.

Amount expended on these as near as we can estimate, $696.

It may be proper here to explain, that for our buildings, we obtain all the materials possible, on our own premises, such as timber, lumber, lime, &c. As for instance, the largest barn we have, built 6 years since, all the work done upon it was by members of the society; so that the sum paid out for such materials for it, as tin, nails and glass, would be but a small part of its value.

Thus it appears that the real estate of the society with all the additions made in 11 years under the Trust Act, amounts to 3,053 acres, which, were they divided among 110 families of five persons each, (our numbers being equal to such a division) then, for each one of such families of five persons there would be less than 28 acres! Also if the increased value of the society's property, for the last 11 years should amount to $25,000, the annual gain to each individual would be but a trifle over ($4,) four dollars, a sum that might have been absorbed by a single useless article of dress. So, if any fears have been entertained that the society is becoming a dangerous money power; or, that it is extending its possessions beyond a reasonable land limitation, it is hoped that they may now be dispelled.

We respectfully submit the above as the best answers we can give to the resolution of the Honorable Senate, and to whom we tender our assurances of due respect and obedience, as to the constituted authority of the government, under which it is our privilege to live. And believing that it is our right, in the pursuit of happiness (as guarantied to us by the Constitution) to possess our lawful property in a community of interest, we claim the continued protection of our rulers in the peaceable enjoyment of our just rights.

JONATHAN WOOD,
EDWARD FOWLER,
Trustees of the United Society of New Lebanon.

New Lebanon, March, 1850.

STATE OF NEW-YORK, }
Albany County. } ss.

Jonathan Wood and Edward Fowler, do solemnly affirm, that they are the trustees of the United Society of Shakers in the town of New Lebanon, and that the foregoing statement by them signed, is according to the best of their knowledge and belief, as full and complete an answer to the enquiries directed to them by the clerk of the Senate of the State of New-York, according to their understanding of them, as they are able to make.

JONATHAN WOOD,
EDWARD FOWLER.

Affirmed before me, }
March 18, 1850. }

A. J. PARKER, *Jus. Sup. Court.*

REPORT

Of the Trustees of the United Society of Shakers in the town of Watervliet, Albany county.

To the Honorable Senate of the State of New-York:

We, the trustrees of the society of Shakers in the town of Watervliet and county of Albany, respectfully

REPORT:

That having carefully examined the resolution of your honorable body in all its parts and bearings, we find it utterly impossible for us to fulfil the obligations therein required; and this we think must appear obvious to every candid mind who will take the trouble to give it a thorough investigation.

The purport of this resolution, as we understand it, is to ascertain the annual increase of property obtained by the different societies of Shakers within this State; that it may be understood by the legal authorities, whether they have not forfeited the protection of their *trust act*, by amassing to themselves an income surpassing five thousand dollars a year.

Inasmuch as the honorable Senate feel under obligations to look into this matter, that they may be able to close every avenue through which we are, or may be exposed, to endanger our rights and privileges as a society or community, we cheerfully comply with this design. But instead of attempting to make out an estimate of our annual income in the form recommended in the resolution, we beg leave to state, that we have adopted a form as being more brief and equally efficient, by which we have as-ertained as correctly as we are able, the average valuation of our increase of property for the last eleven years.

In doing this, we have been guided by the limitations set forth in said act; and trust that the honorable Senate will accept our estimate as a statement of facts, to which we are ready to give our affirmation.

From an examination of the trust act, passed April 15, 1839, we cannot believe it was the design of the framers of that instrument that we should be prohibited from improving our premises by erecting new buildings and new fences in the place of those which have become decayed through age; or from adding to the number of our buildings by erecting new ones, whenever our needs seemed to require it; or from purchasing additional lands, whenever we found it necessary, either for cultivation, pasture or woodland.

And if our understanding of the act is correct, the estimated cost of such buildings and lands belongs among the necessary expenses which the said act allows to be deducted from the annual income of the said society.

The whole amount of land owned by this, the aforesaid society, and the valuation thereof, as taken from the assessor's roll of the past year, does not exceed two thousand five hundred and forty-seven acres, and valued at forty-six thousand nine hundred dollars.

After a full and thorough adjustment, we find that the whole amount of property, both real and personal, belonging to this society, and held by us in trust, together with all our labor thereon, has not yielded for the last eleven years, a nett income averaging over one thousand two hundred and seventeen dollars and fifty-three cents, (1,217.53.)

All our other incomes, over and above what was needed and expended for domestic purposes, have been disposed of as shown by average, for the said eleven years, in the following brief catalogue:

Donations to sufferers by fire, and other distressing calamities, averaging one hundred and twenty-two dollars and sixty-nine cents,.............	$122 69

Small and numerous donations to destitute individuals, poor families, and those who almost daily apply to us for food and clothing, averaging two thousand two hundred and eighty one dollars and seventy-seven cents,........................	$2,281 77
Counsellors' fees, costs of court and the like, averaging twenty-two dollars and sixty-three cents,...	22 63
Average amount of taxes, four hundred and thirteen dollars and forty-two cents,..................	413 42

Losses since April 15, 1839.

Stock in the Watervliet bank at West Troy, four thousand and seven hundred dollars. (This is all the bank stock ever owned by this society,).....	4,700 00
Losses by fraudulent characters in trade, and failures of debtors, averaging four hundred and thirty-four dollars,.........................	434 00
Losses by theft or money stolen, averaging seventy-two dollars and twenty-seven cents,...........	72 27

The foregoing estimate of donations to the suffering and poor, is not given for the purpose of trumpeting abroad our deeds of charity, but merely to show the disposition we make of a large amount of our earnings, instead of hoarding it up for our own particular benefit as it appears that many think we do.

We might further observe, that although we pay our quota of the poor taxes, yet we have never received one cent from that fund towards the support of the poor of our society. Therefore, all that we pay out for that purpose, may with propriety be termed an additional donation to the poor.

In conclusion, the average amount of the above different items of donations, &c., makes a yearly sum of three thousand seven hundred and seventy-three dollars and ninety-six cents, ($3,773.96) which multiplied by eleven, shows a total of forty-one thousand five hundred and thirteen dollars and fifty-six cents, ($41,513.56,) for the last eleven years, over and above onr domestic expenses and annual increase of one thousand two hundred and seventeen dollars and fifty-three cents.

Now, when it is considered that all of the above mentioned sums of expenditures and losses are drawn together by honest industry, without the aid of speculation, and that too, by so small a number of people, which at present does not exceed two hundred and eighty, including male and female, aged and children, we presume that the honorable Senate will be satisfied that we have not transcended the limits of the law in our accumulations, and will therefore resolve, that we may rest in peace on that subject until the income of our property actually exceeds $5000 per annum.

CHAUNCEY COPLEY,
STEPHEN WELLS,
JOSEPH GOODNOW,
Trustees of the United Society of Watervliet.

STATE OF NEW-YORK, } ss:
Albany County, }

Chauncey Copley, Stephen Wells and Joseph Goodnow, do solemnly affirm, that they are the trustees of the United Society of Shakers in the town of Watervliet, and that the foregoing statement by them signed, is, according to the best of their knowledge and belief, as full and complete an answer to the enquiries directed to them by the clerk of the Senate of the State of New-York, according to their understanding of them, as they are able to make.

CHAUNCEY COPLEY,
STEPHEN WELLS,
JOSEPH GOODNOW.

Affirmed before me, this }
19th day of March, 1850. }

J. O. Cole,
Police Justice, city of Albany.

State of New-York.

No. 90.

IN SENATE, MARCH 20, 1850.

REPORT

Of the Committee on Finance on a memorial of the Executive Committee of the Free Academy, New-York, for an appropriation of $15,000 for a Library.

Mr. Morgan, from the standing committee on finance, to which was referred a memorial of the Board of Education of the city of New-York, for an appropriation for the purpose of purchasing a library for the Free Academy in that city, asks leave to submit the following

REPORT:

The Free Academy was established under an act of the Legislature passed May 7, 1847, which act provided that the question whether such an institution should be established or not, should be determined by the votes of the electors of the city and county of New-York, at the charter election to be held next after the passage of the act.

The question was so submitted, and was decided affirmatively by an almost unanimous vote. A site was purchased at a cost of $25,000, and building erected at a cost of $48,000, capable of accommodating nearly one thousand students. The building has been fitted up, supplied with text books necessary at the period of organization, and furnished with all the appliances of a chemical laboratory, at an expense of about $15,000, and for a philosophical and chemical apparatus there has been expended a further sum of $5,500, which sums form an aggregate of nearly *one hundred thousand dollars* expended by the city and county of New-York for the establishment of the institution.

The object of the Free Academy is to furnish the means of education gratuitously to pupils entering it from the common schools of the city, and its admissions are confined to them, receiving mainly those who are in a state of preparation for a thorough education of a character to qualify them for usefulness in the various industrial occupations which they may pursue.

The thorough examination of the pupils applying for admission is believed to have a beneficial influence upon the instruction in the common schools.

It is confidently believed by the friends of the Free Academy that it is destined to become one of the most important educational institutions in the State, possessing, instructors of great attainments, and aiming to educate pupils with a view to fit them for greater usefulness in the various departments of productive occupation, rather than for professional life, renders it one of general and permanent usefulness. It is the purpose of the Free Academy to furnish to the children of the poor as thorough and valuable an education gratuitously, as those more favored with means can acquire in the best endowed colleges in the State.

The chief support of the institution is to be derived from the treasury of the city and county of New-York. By the act, $20,000 per annum may be appropriated for this purpose. The only other means of support is the share of the income of the literature fund, which it will receive on the same basis as the various academies throughout the State.

It will thus be seen that the inhabitants of the city and county of New-York have taxed themselves about one hundred thousand dollars in order to establish the academy, and are to be further taxed about $20,000 annually for its support. This tax has been imposed with great unanimity by their own votes, from a conviction that great advantages will result from a thorough education of the masses, and as well those engaged in mechanical pursuits, as in professional life.

A large proportion of those admitted would have been forever deprived of the means of edncation they are now improving, if the people of the city had not been induced by considerations of public utility and of an enlightened philanthropy, to furnish them at the public expense. No provision has yet been made for the purpose of furnishing a library, and the Executive Committee of the academy have memorialized the Legislature for an appropriation of $15,000 for that purpose. Regarding it as a part of the policy of the State to aid in advancing the cause of popular education, and to grant some support to the various public institutions which promise advantage in the system of instruction, in furnishing a thorough education to enlarged numbers of the children of all classes and occupations, your committee could not hesitate in recommending the Legislature to make an appropriation for the free academy in the city of New-York, for the purpose of procuring a suitable library for the use of the institution, provided such an appropriation, if made, could be paid from the surplus money in the treasury, and thus avoid a resort either to a loan or to direct taxation. They, however, regret to say, that they are unable to discover any method by which such an appropriation can at the present be paid, without adopting one or the other of the above mentioned measures, or without depriving some of the charitable institutions in the State of their usual stipend, neither of which, it is believed, the Legislature are willing to adopt. Large as are the revenues of the State, by the income from its public works, and as difficult as may be the task of those upon whom the duty shall devolve, to make a wise and judicious disposition of its annual nett revenue, which, under any probable circumstances, must be very large after the year 1865, when the indebtedness of the State shall have been wholly liquidated, yet it cannot be disguised that the means at command for many present useful purposes is very limited.

The convention which framed the constitution very properly endeavoring to avoid too large an accumulation of debt, and in the anxiety to provide for its entire extinguishment by the year eighteen hundred sixty-five, have so tied up by constitutional provision, the revenues to be derived from its canals, as to leave in reality, no alternative but direct taxation for many proper objects of State munificence. Providing as the constitution does for an appropriation of $1,300,000, to be set apart in each year till 1855, and after that period $1,700,000 as a sinking fund to pay the interest and to redeem that part of the debt called the canal debt, and for $350,000 to be set apart in each year to pay the interest and redeem that portion of the State debt called the general fund debt, for a limited period, then appropriating $1,500,000 annually to extinguish the entire indebtedness of the State for all purposes, it requires prudence and foresight on the part of the Legislature and an economical administration of the government, to avoid all new burthens upon the people, in the shape of either loans or taxation, which the standing committee on finance are very far from being willing to impose upon them. The committee nevertheless believe that with economy in all public expenditures, and with a prudent forbearance on the part of the Legislature in authorizing new appropriations to objects of local or doubtful character, the State will be in a situation to afford some aid to many useful objects of general and permanent interest to its citizens for which its present means in the Treasury are inadequate, and while your committee are the friends of education both in the elementary and in the higher branches, and would gladly recommend appropriations for educational purposes; if at the same time there should remain an amount sufficient for the accustomed charitable objects, yet, when as in the present case, there is not enough for both, the friends of the free academy will never murmur if denied, when they know that any donation to their institution must be taken directly from the fund destined for the charitable societies.

In selecting as proper objects of State munificence, when the condition of the treasury will justify such an appropriation, the free academy of the city of New-York, in the opinion of your committee, will be fully entitled to favor; but for the want of funds applicable to this purpose, the present application before the Legislature cannot with propriety be granted.

And your committee would also improve the present occasion to state that for the same general reasons which have controlled their decision in the application for the free academy library, they will also be compelled to come to a like result in relation to several similar applications which have been referred to them, but on which they may not consider it necessary that written reports should be made on each appplication.

Respectfully submitted.

EDWIN D. MORGAN,
CHARLES COLT,
WM. HORACE BROWN.

State of New-York.

No. 91.

IN SENATE, MARCH 26, 1850.

REPORT

Of the minority of the Committee on commerce and navigation, in relation to wharfage in Albany.

Mr. Williams, from a minority of the committee on commerce and navigation, to which was referred the Assembly bill entitled, "An act in relation to the prices of wharfage hereafter to be charged for vessels landing at the pier, on the east side of the city of Albany," asks leave respectfully to

REPORT.

That the interests affected by this bill are deemed important by the applicants for the law, and by the pier owners who are opposed to its passage; the matter was very fully discussed before the committee, and the undersigned has given it the attention which its importance demanded. The Albany pier was constructed under the authority of an act of the Legislature, passed April 5, 1823. By the said act certain persons therein named, and their associates, were authorized to construct a mole or pier in the Hudson river, opposite the city of Albany, so as to form a basin for the accommodation of canal boats and river craft; there was to be a sloop lock at the southern terminus of said basin, and the pier and lock were to be constructed according to such plan as should be approved of by the Canal Commissioners, and the certificate of the completion of said work from one of the Canal Commissioners was required to be recorded in the office of the Comptroller of this State. The corporation of the city of Albany were also required to file their consent to said law, written sixty days after its passage, in the office of the Secretary of State, otherwise the bill was to be void. It is admitted that such consent of the corporation of the city of Albany was given and filed in the Secretary's office, as required by the said act, and that after the completion of the pier and sloop lock, one of the Canal Commissioners duly gave his certificate thereof, as required by the act; that the said pier was subsequently subdivided into lots and sold by the said Commissioners, as directed in the seventh section of said act; that the sale took place in the summer of 1825, and the purchasers went into possession of said lots, and all the rights secured to them by the said act at that time; and they, or those holding under them, have continued in possession of said lots and rights to the present time. The right of wharfage was one of the rights conferred by said act, and there is no provision made in said act authorizing the Legislature to alter or repeal the act. It satisfactorily appeared before the committee that the leading and influential men of business and property in the city of Albany in 1823, comprising a majority of the owners of the principal wharves, at that time, became sbscribers to the fund for erecting the pies, and that the corporation of Albany, in addition to giving their consent to the law, united, in 1825, in executing the deeds given by the commissioners under the act of 1823 to the purchasers of the lots on the pier. The corporation of the city of Albany, and a large number of persons, now petition the Legislature to alter, or so far modify said act, as in the estimation of the owners of said pier lots, to injure or impair the value of their property in said pier, and, as they contend, interfere with the constitutional rights under said act. The pier owners contend that the law is in the nature of a contract between the State and themselves, and that they have fulfilled the contract on their part, as is evidenced by the certificate of the Canal Commissioners, on file in the Comptroller's office; that their rights are vested, and that it would be a violation of those rights to alter the terms of said act as proposed by the present bill.

The undersigned feels constrained to adopt the views of the pier owners in their construction of the said act of 1823; that the pier was built under said act by the parties subscribing for that purpose, and that the consideration therefore was the wharfage and other privileges secured to them under said act, without the expectation of any income from their investment they would not have made it.

If the Legislature could now interfere and deprive them of this source of income or materially lessen it, they could have done so at the very next session after the completion of the pier. This could not have been the understanding of the parties who accepted this act, or, I think, of the Legislature who granted it. If it has turned out a good bargain it is their good fortune. If it has turned out a bad one, it is hardly to be supposed that any one would have made good their loss.

The undersigned is of the opinion that if the question was an open one, some modification in the laws regulating the wharfage in the Albany basin, might, and ought to be made; but regarding the law of 1823, as binding on the Legislature, he has not deemed it proper to attempt to perfect a bill for that purpose.

The bill under consideration is defective in its details, but for the reasons before stated, the undersigned is of the opinion that it ought not to pass in any form.

RICHARD S. WILLIAMS.

March 25, 1850.

State of New-York.

No. 92.

IN SENATE, MARCH 25, 1850.

REPORT

Of the majority of the committee on Medical Societies and Colleges on so much of the Governor's message as relates to the cholera.

The majority of the standing committee on medical societies and colleges, to which was referred that portion of the Governor's message relating to cholera and other infectious diseases,

REPORT:

Your committee not being practically acquainted with the disease known as *Asiatic cholera*, have not thought best to trouble the Senate with any speculations of their own on a subject so important in all its features to the interests of community, as the one under consideration; but in order to meet the expectations of the public and to comply with the patriotic recommendation of his excellency, the Governor, have solicited communications from different eminent medical gentlemen, whose opportunities have been the most extensive for acquiring a knowledge of this disease, to which they refer the Senate as containing *all* that in the present state of medical science can be relied on in the treatment of this terrible scourge; together with many valuable suggestions in relation to the necessity for a more stringent system of sanitary and quarantine regulations, in order to protect the citizens of this great commonwealth, especially our large villages and cities, from the fatal consequences of another visitation of this fearful malady, and to prevent the diffusion of all other diseases of a pestilential or malignant character.

The nature and treatment of Asiatic Cholera are questions of much obscurity at present, involving the vexed question of contagion or personal communicability, upon which your committee do not wish to express an opinion, but refer the Senate for a more complete solution of this very difficult problem in pathology to the very able papers on this subject by Doctors W. P. Buel, A. Vache, and Professors Reese and Clark, who have had ample opportunities for witnessing the various phases it assumes ; of watching its progress and of observing the laws by which it is governed, so far as they are within the reach of human comprehension, which are herewith presented for the consideration of the Senate, as a *part of this report.*

The committee deem it to be their dnty, without intending to express any opinion on the mooted question of contagion, to recommend the propriety of adopting some measures, in connection with quarantine, to purify the persons and clothes of individuals arriving at our ports, sick with malignant cholera or other infectious diseases, while subject to quarantine, as necessary to prevent the spread of disease after such persons shall be permitted to mingle with our citizens.

The committee deem it a duty they owe to the public welfare, to call the attention of the Legislature to the importance of a State Commission of competent persons, whose duty it shall be to make a sanitary survey of the State, and to report to the Legislature at its next annual session, feeling confident its utility will be apparent in furnishing accurate information, as to the many sources of disease and death to be found in almost every portion of the State, in the low swamps and stagnant water pools, and in the vast amount of vegetable matter exposed to decomposition, filling the atmosphere with a poisonous malaria, and scattering the seeds of disease and death in every direction, to say nothing of its importance to the agricultural interests of the State which would result from a thorough system of drainage.

Whether the cholera is soon to revisit our country, is known only to the SUPREME RULER. That it has shown itself lately, at different points in our land, is a significant fact. It may be that the influences so fatally energetic, but a few months ago, now linger only to strike here and there a mortal blow, as they prepare to pass away from us. It may be that these occurrences are monitors to warn us of ravages about to be renewed. To be prepared for the event is the course of wisdom.

Millions for defence is our national boast. Why grudge the cost of protection against a destroyer more fearful than any mortal foe. With reference to that portion of the Governor's Message which suggests the propriety of securing "*the benefit of the combined experience of scientific and learned men throughout the State with respect to the origin, the cause, the progress, and the treatment of all malignant and infectious diseases,*" two plans have been suggested to the minds of the committee; the first, to establish a medical commission, either permanently, or for periods, during which the public health is unusually endangered, who shall consider and investigate such subjects as may from time to time be referred to them, in connection with the public health, and to report their views to the Legislature on all subjects which in their opinion require the interference of law; or, secondly, that the State look for medical advisers in the State Medical Society, or to the faculties of those medical colleges which receive pecuniary aid from its munificence. In making this last suggestion the committee would not be understood to draw any comparison between the men associated in these bodies, and other members of the profession. But the State has less claim on the time and labors of private physicians, than would perhaps be recognized by those who hold offices created by its choice. Recognizing the wisdom of the recommendation of the Governor, the committee are not prepared to say that they have fallen on the best plan to accomplish it.

Finally, your committee have come to the following conclusions, to which they respectfully ask the attention of the Senate.

1st. In view of the facts before stated particularly, considering the unsettled state of professional and public opinion, regarding the contagiousness of cholera, and the moral effect of giving free admission into our ports to vessels having this or other pestilential or contagious diseases on board, they are not prepared to recommend any such alterations in existing quarantine laws or regulations as will exempt malignant or Asiatic cholera, typhus or ship fever, and small pox from the restraints now legally imposed by the State.

2d. They recommend that general provisions be made by law for the appointment of a board of health in every town, village and city in the State, whenever the health of such town, village or city is invaded or threatened by any malignant or infectious disease. That in the towns, this board consist of the supervisor, the justice of the peace, and at least one physician, to be appointed by the supervisor and the justices of the peace: that in every village where a board of health is not already provided for by law, they have power at their discretion to appoint such board, or a sanitary committee with the full power of a board of health, to consist of not more than seven, nor less than five persons, of whom, one at least, shall be a physician; and that in every city, not now in like manner provided for by law, the common council may appoint such board, or a sanitary committee, with the full power of such board, to consist of not less than seven, nor more than nine persons, of whom the resident physician, if there be one, and at least two other physicians, shall be members: that these several boards shall have full power to establish quarantine against malignant or infectious diseases; to remove nuisances and filth of every sort; to establish hospitals for the sick; to appoint a health officer and physician to attend the sick poor at their own dwellings, or at their discretion to remove persons sick of a contagious disease, to some safe and proper place; to prohibit the sale of unwholesome articles of food, and to do all things, which, in their judgment, the safety and health of community may require.

3d. They recommend that it be enjoined on the officers and persons above named, to establish a board of heath, or sanitary committee for protection whenever there is any just ground to apprehend its approach, and to do all things necessary for a thorough cleansing of their towns, villages or cities, and all the dwellings therein, and early to warn the inhabitants against such indiscretions as may expose them to danger; so far, if possible, to prevent the visitation of the disease, or at least, in case of its actual appearance, to *diminish its fatality*, by the timely removal of all accessory causes.

4th. They recommend that measures be adopted by the Legislature to ascertain how far the State can judiciously extend its aid to the establishing of FEVER HOSPITALS in our large cities.

5th. They regard it as among the legitimate duties of the public authorities to provide liberally wholesome food, suitable clothing, and as far as may be, proper dwellings for the suffering poor, from whose ranks the *pestilence* supplies daily its hecatombs of victims.

C. D. ROBINSON,
R. S. WILLIAMS.

Communication from D. M. Reese, M. D.

That portion of the message of His Excellency, the Governor, which invokes the attention of the Legislature to the public health, has peculiar importance at the present time, in view of the recent calamitious visitation of various portions of our State by the epidemic denominated *Asiatic cholera*, and the subsidence of which is so justly referred to as cause of mutual gratulation and of thanksgiving to the sovereign Ruler of the Universe.

But the past history of this formidable disease, its anomalous and erratic variations of access and decline, and especially the peculiarly exposed condition of the great metropolis of our State to its introduction, by the increasing tide of immigration from trans-Atlantic countries, which the daily and almost hourly arrival of crowded ships admonish us is still destined to go on in an augmented ratio, all serve to render it possible, if not probable, that a recurrence of the malady in our midst may well be apprehended. And while waiving, as we do, any decision of the question of its communicability from the sick to the well, by the laws of contagion, the medical faculty of no country being absolutely agreed upon this point; it must, nevertheless, be obvious to all, that the occurrence of a few fatal cases among any portion of the population, giving evidence that the dreaded cholera is again among us, would be the signal for a general consternation and panic among our fellow-citizens, which of itself would be most disastrous to the interests of commerce, and as experience has proved, would serve to increase immeasurably the liability to its spread and prevalence.

Hence it becomes the imperative duty of the Legislature to provide against the introduction of persons sick, or supposed to be sick with cholera, by every possible guard which may be within their power. For although the history of cholera has amply shown that no absolute reliance can be placed upon quarantine restrictions, however strictly enforced, for entire exemption from the introduction of the pestilence, yet it has been equally proved, that without such restriction, the community would be thrown into needless and mischievous alarm by a few examples, or even a single case of cholera occurring in their midst, landing from ships, on board of which cases have occurred during the voyage. In view of these facts, then, it is due to the public health, that the Health Officer should be empowered and required, by additional legislation, if called for, to detain not merely the sick of cholera as now in the Quarantine Hospital, but to prohibit all the persons on board such vessels from mingling with the healthy population of the State, until he shall be satisfied that they are free from the predisposition to the disease, which is inseparable from them on their first arrival in a vessel, on board of which the pestilence has appeared.

But while the sick are forthwith removed from such vessel to the hospital, the well should not be condemned to remain on board, but be immediately removed to the shore; and accommodations should be provided for them within the quarantine, until the health officer shall satisfy himself that, by proper regimen, they are free from any predisposition contracted during the voyage. Their own safety, not less than the public interest, demands this course of temporary subjection to quarantine. And for this purpose, buildings sufficiently remote from those occupied by the sick are indispensable; and to these last, any who may be attacked should be instantly transferred. The hospital for cholera patients should be sufficiently isolated from all the other hospitals as to allay apprehension on the part of those sick with other diseases, and non-intercourse with such hospital should be rigidly enforced. The necessity of more extensive grounds and buildings than those at present occupied at Staten Island would seem to be imperative.

Such precautions and prudential measures, in connection with our quarantine establishment, would seem to include all the preventive measures within the reach of legislation, and would secure us from any semblance of foreign importation of cholera, so far as human foresight can furnish such security.

The subject of the powers granted to municipal authorities, and other local Legislatures within this State, for the prevention and removal of nuisances, and the prohibition of offensive and deleterious occupations within thickly inhabited districts, has been very properly commended to the attention of the State Legislature; these powers being regarded as at present inadequate in extent, and contingent in some cases, instead of being perpetual and permanent.

This aspect of the question, in view of another visitation of the cholera as an epidemic, is one upon which there is but little diversity of opinion among enlightened men, whether in or out of the medical profession. All will concede that impure air, illy ventilated houses, filthy and crowded apartments, and especially those varieties of manufacture which generate offensive and noxious effluvia, are pernicious to health, but signally so during the prevalence of cholera or any other pestilential disease. These sources of mischief to the public health abound most in large and populous cities, or where there is a dense population. And that under such circumstances the municipal authorities should have the power to remove such nuisances and suppress such occupations, and that in a summary way, if emergencies occur endangering the health and lives of the masses of population found in large cities, would seem to be apparnt. "*Salus populi suprema est lex*," is a maxim as sound as it is venerable, commending itself to the intelligence of the public mind, and constraining the conviction which is everywhere felt to be public sentiment in times of general calamity, that private interests must be sacrificed to the public good, at any expense. It is the dictate, therefore, alike of policy and duty, that all necessary powers should be extended to local authorities throughout the State, to meet and provide for the emergencies which may occur in the event of a recurrence of cholera, or other similar pestilence, within their limits. The revision and reenactment of the law of 1832, entitled "An act for the preservation of the public health," with suitable amendments, will probably meet the views of his Excellency the Governor in calling attention to this subject.

The experience of the last year would suggest, however, that some further legislation is called for, in reorganizing, or investing with new powers the several boards of health in our large cities, and particularly in the city of New-York. The recent report of the sanitary committee of the board of health of the latter city having admitted and deplored the absence of any sufficient sanitary or medical police, at all adequate to such an exigency as that of 1849. Ought there not to be, especially in so large and exposed a city, some specific and permanent provision by a board of medical officers, who should have in their special charge the sanitary regulations of the city, for the prevention and removal of the causes of all pestilential and malignant diseases; and whose duty it should be to guard against the accumulation or concentration in any section of the city, of such conditions of the population as may engender disease, and by promtly reporting to the respective departments all the causes which they may judge endanger the public health, render it possible to effect their removal in time, without waiting until the development of a deadly pestilence in the neighborhood shall disclose the sources of poison to the atmosphere, after the commerce and trade of the city has been ruined, and scores or hundreds of lives have been sacrificed.

Whatever may be doubtful or inscrutable in regard to the cholera, all experience has proved that the spots in our cities which are pre-eminently the nuclei whence its fearful ravages spread with the greatest rapidity and mortality, are those in which are found the most filthy, degraded and vicious of our population, who are congregated in dense masses, amid squalid poverty, and in apartments not only without ventilation or cleanliness, but in which neither of these necessaries of human life can by possibility exist under the circumstances surrounding them. From these localities and other kindred nuisances found as they are in different sections of a large city, the atmospheric poison here engendered radiates and spreads in conformity to the known laws of pestilence, infecting the air of otherwise healthy localities, until a general epidemic overspreads the entire population with disease and death,

Violation of the laws of health and life are now well understood, to be among the most prolific sources of pestilential diseases; and while many such are admitted to be incidental to large cities, and inseparable from a dense population, yet the mischiefs resulting therefrom, may be mitigated and confined within very narrow limits, if a skillful and scientific board of intelligent physicians were officially charged with their discovery, and with the duty of timely applying the remedy.

Instead of a city inspector who may or may not be a physician, and often, *as now*, is *not* a physician, the medical police of a large city is quite as important as any other department of its government, and calls for a commission for its adequate management, composed of medical men, and this as imperatively as does the cause of popular education, or any other subject of great public interest; and should be entrusted to a board of judicious and qualified citizens, whose public spirit, education and pursuits fit them to direct and conduct the sanitary measures called for by the public safety. The developments of the past year have demonstrably shown, that had such a medical board been organized with suitable powers, in connection with the board of health in the city of New-York, *in anticipation* of the appearance of the pestilence, it might have been shorn of its terrors, if not wholly prevented. The wisdom of such a measure, instead of waiting until the epidemic was raging, and then summoning a medical council, after the mischiefs of neglect were irreparable, would seem to be too obvious to require argument. And the identity of interests on this important subject between the *state* and *city* would seem to furnish paramount reasons for legislative action, lest another year shall find us again the sufferers by a repetition of the calamitous visitation of epidemic cholera.

You will see that by the new city charter, the whole subject of the public health in the city of New-York, is committed to a department of which the *city inspector* is the head, and what provision is made for the resident physician and commissioner heretofore associated with the health officer and appointed by the Governor and Senate, seems to be obscure, and the continuance of these officers seems to be doubted by the present city inspector, who, as the executive head of the sanitary department, is understood to claim the power of appointing these two officers, under the new charter.

Is it not clear, then, that the health of this great city, and correlatively the health of the entire State, ought to be better guarded, and ought there not to be a commission of medical men permanently associated with this department by State authority?

It is certain that with the increase of our dense population, the sources of disease are multiplying in our midst, and without constant and rigid police, the hitherto proverbial healthfulness of New-York, will be forfeited by local causes. Houses are constantly going up, constructed by speculators, without the least regard to the health and lives of the families who are to occupy every room, from the garret to the cellar, all being separate tenements, and the buildings covering the entire area of the lots on which they are built, so that in many instances there are no provisions for ventilation; the light and air of heaven being shut out to a great degree, and a healthful cleanliness or purification of the atmosphere being rendered impossible. Old breweries, factories and other dilapidated buildings, are refitted and crowded with poor families in like manner, without any regard to the laws of health or life, and by these and the like means sickness and mortality are generated in such premises to an appalling extent, while the whole neighborhood surrounding such plague-spots, are visited with the like calamities; and fearful epidemics are thus either created or aggravated when arising from other causes.

Communication from W. P. Buell, M. D.

New-York, *Jan.* 14, 1850.

To the Hon. C. D. Robinson, Chairman Committee on Medical Societies and Colleges, N. Y. Senate:

Sir,—The undersigned in compliance with a request from your honorable committee, will proceed to offer some remarks and suggestions in relation to Asiatic cholera, under the several heads named, viz, "its nature, origin, progress, causes, treatment, and what alterations may be necessary in existing laws, what new regulations, precautionary or sanative, to prevent its diffusion."

The field opened for discussion is wide and extensive. To do it ordinary justice, would require a large amount of time, and extensive enquiry and research. It is evidently the design of your honorable committee to make the investigation a practical one, and to obtain more especially from different individual observers, such suggestions as may have been the result of their own practical experience rather than of speculative opinions or hypothetical deductions.

The undersigned has had the opportunity of witnessing and personally observing the three epidemics of Asiatic cholera which have visited the city of New-York, viz, in 1832–34 and '49. In the first and the last, his opportunities were perhaps as extensive as those of any other practitioner, from being connected with the largest hospitals open during the epidemics, viz. with the Park Cholera Hospital, (present Hall of Records) in 1832, as assistant physician, and with the Centre and 35th street Hospitals, in 1849, as Principal.

1. *Origin and progress of Asiatic Cholera.*

The main facts on this part of the subject are too well known to your honorable committee to need repetition. Commencing in the Indian peninsula, about the delta of the Ganges, it numbered its victims by tens and hundreds of thousands. In these regions Asiatic cholera is endemic. It is never absent. The feeble Hindoo, dwelling amid the swamps and jungles of the Ganges, inhaling always a miasmatic atmosphere, scantily fed upon rice, has no stamina to resist disease of any kind. Before this giant malady he perishes like the moth.

At three different epochs, leaving its original seat and centre, Asiatic cholera has extended itself westward over western Asia, Continental Europe, the British islands, and lastly, crossing the Atlantic, over a large portion of the western continent. Confining itself to no particular localities, it has on both the eastern and western continents affected mostly the banks of large rivers, the alluvial and diluvial regions of the earth. Mountainous and hilly regions, arid and sandy plains have been comparatively exempt. Its *law* or *ratio* of progression has never been accurately ascertained. During its recent invasion about a year was occupied in spreading from the Persian Gulf to the Caspian Sea, about 20 degrees of longitude. At other times it has leaped at a single bound over twice or thrice that number of degrees. During the winter of '48–9, it prevailed extensively in the Mississippi valley, crawling slowly up the large rivers. It did not cross the Alleganies. During the same period it was prevailing in England and France. Emigrant vessels arriving at the quarantine, New-York, during the early spring of '49 had constantly cholera on board. On the 11th of May it broke out on the "Five Points," N. Y., but entirely without any traceable connection with cholera at any other point.

2. *Causes of Asiatic Cholera.*

The question of contagion is by far the most important in reference to the causation of cholera. Admitting the existence of contagion or personal communicability, the absolute necessity of quarantines and cordon sanitaires is at once conceded. Repudiating that doctrine, all such cumbrous machinery is at once dispensed with. More than that the pestilence is robbed of half its terrors. The victim of cholera will not be forsaken by his nearest relative, and left to perish, without a friendly hand to close his eyes or assuage his dying agonies.

These considerations, however, are of no moment, and entitled to no consideration, if the theory of contagion or personal communicability can be fairly established. The undersigned will proceed to examine briefly some of the evidence which is mainly relied upon to establish the theory of contagion and also to state the arguments which it is believed show conclusively that cholera is never, in the proper sense of the word, a contagious disease.

1. *The argument in favor of contagion.*

There is a class of facts on which great stress is laid in establishing the doctrine of contagion. These are principally the circumstance that cholera very frequently makes its first appearance in seaport towns and cities, simultaneously or nearly so, with the arrival of vessels with cholera on board, and *appears* to extend as from a common centre.

This was the case in New-Orleans, at the commencement of the recent epidemic. This was also the case in the celebrated instance of the outbreak of cholera at Folly Island, near Charleston, S. C., in 1832. There are very numerous instances of a similar description. It must be admitted that they wear a certain degree of plausibility in favor of contagion; yet, on the other hand, we must recollect that such instances do not occur except when the agency which produces cholera is abroad in the earth, extending over entire continents. It is confidently believed that in such cases there are always facts which prove that the epidemic influence had been previously at work. There is existing over the entire population an unusual tendency to bowel complaints. The train is already prepared: it needs but a spark to ignite it. The terror and excitement occasioned in any community by the announcement of the arrival of that fearful pestilence, before which "all faces gather paleness," and which has strewed the world with corpses, has no small agency in developing the disease. The ghastly appearance of its victims, the nausea and disgust produced in those who witness the alvine discharges and the different symptoms in a case of cholera co-operate strongly in this result. It may be objected that cholera and no other disease is reproduced. True, because the cholera influence was there and everywhere. Like an invading army, it had sent outposts in advance in the shape of diarrheas and bowel complaints.

In like manner, as in New-Orleans, a vessel arrived at New-York almost simultaneously, in December, 1848, with cholera on board. There was no quarantine established that could at all interfere with its extension, yet it did not extend itself. Why? Because the epidemic influence was not there. When the cholera did really show itself in New-York epidemically in May, 1849, it was entirely distinct from any foreign importation.

Again, it is said that cholera follows large rivers, and the great channels of intercommunication; it follows also the march of armies, as in the Black Hawk war in 1832. Undoubtedly, cholera goes where it finds material to feed upon; where masses of men are congregated; in crowded cities and great marts; in camps and armies. And here it is worthy of remark, that when cholera does leave the great lines of communication, and show itself in secluded towns and villages, it seldom extends itself. Those in immediate attendance upon the sick, and frequently panic stricken, may suffer, but it seldom occurs that the physicians in attendance are attacked with cholera, for the reason that they are seldom as much alarmed as others.

Time would fail us to examine all the facts supposed to faver the idea of contagion. It is believed that all of them can be explained. One or the other of two suppositions. Either they have been merely accidental coincidences, or the instances of supposed contagion have been the result of terror and apprehension and other moral influences, or physically of the nausea and disgust produced from witnessing the symptoms and progress of the disease.

2. *The reasons why cholera is believed not to be contagious.*

It pervades almost simultaneously entire continents and great portions of the earth's surface. It does not spread progressively from point to point, but appears at the same time in many different and remote places. This is not the case with small pox, and other confessedly contagious diseases. It is true they prevail more in some seasons than in others, owing, as is supposed, to an epidemic influence, but we never hear of their spreading over entire continents.

Cholera requires for its germination and development, certain cooperating causes, such as a malarious atmosphere, a certain degree of heat, filth, dampness, intemperance, bad nourishment, &c. Even in communities where it is most rife, the great majority who pay strict attention to Hygienic rules, escape an attack, though they may be constantly in contact with the disease. Is this true of any other disease admitted to be contagious?

In five cholera hospitals opened in New-York during the recent epidemic, there was not, among all the physicians employed, a solitary death by cholera; though in each one there were several medical attendants, day and night, in the hospital. Of the nurses, and other non-medical attendants, a number sickened and died. It is believed in every instance they were intemperate persons, or had committed gross errors in diet.

Among the hundreds of physicians in the city, not connected with hospitals, many of whom were engaged day and night in attending cholera cases, the sickness and mortality were very small, probably quite as much so as in any class in society.

The strongest advocates of contagion will, it is supposed, admit the existence of a certain epidemic influence, be its nature and essence what they may. But they contend that under certain circumstances, the disease becomes contagious. This is what is by some termed "contingent contagion." But upon what rules of philosophising, it must be asked, when we have one cause abundantly sufficient to produce a certain phenomenon or result, why resort to another and second cause?

Another and very strong argument against contagion is the fact, that no quarantine, however severe, no cordon sanitaires, however strong, have ever been able to interrupt or impede the march of cholera. It laughs to scorn all such machinery, even when backed, as they have been, by millions of bayonets. "Sedet atra mors," still remain true.

If it were deemed necessary to enter more at length upon the discussion, many other reasons might be cited. It is believed that the facts and arguments already adduced, fully establish the position that *cholera is not a disease communicable by contagion or personal communicability.*

With regard to the real and essential cause of cholera, its true nature and mode of existence, we are profoundly ignorant. To say that it is atmospheric, is but a cloak to our ignorance. Whether the inscrutable agency that produces it be atmospheric or telluric, electric or magnetic, solar, lunar or sidereal, whether emanating from bodies celestial or bodies terrestrial, we know absolutely nothing.

No human chemistry has yet been able to detect the cause of cholera, except in the existence of certain results, which presuppose, the necessity of an adequate cause, we know nothing of the agency which produces cholera. It is one of those mysteries which compel us to bow in silent submission before the decrees of an inscrutable but all-wise Providence.

But while compelled to acknowledge our ignorance of the true and essential cause of cholera, all experience and observation demonstrate that in the temperate regions of the earth, certain predisposing and exciting causes, certain co-operating influences are indispensable to the germination and development of cholera poison, without which the primary and essential cause is almost inoperative.

These predisposing and exciting causes are well known to exist in every agency, moral or physical, which tends to depress the powers of life and produce a debilitated and atonic condition of the system. Among the most active are the depressing passions, fear, anxiety, and despondency. Intemperance and excess of every kind in eating and drinking, improper and indigestible food. Impure air arising from personal, domestic, and public filth, or from neglect of ventilation. Low, damp, and unhealthy situations, in fine all those causes which are peculiarly operative upon the lower strata of society, and which, especially in large cities, are the unavoidable concomitants of ignorance, poverty, and destitution. If, during the recent epidemic in the city of New-York, there could have been any agency, human or superhuman, which could have taken up and transported far away from the haunts and purlieus of poverty, destitution and crime, the thousands and tens of thousands of our miserable and degraded poor, cholera would all but have disappeared. The upper and middling classes of society furnished but a small and insignificant quota towards the hecatombs which the cholera numbered among its victims.

From the foregoing remarks it is perfectly obvious, that all measures designed to check and control the extension and progress of Asiatic cholera, must have a primary reference to the improvement of the condition of the poor, to their moral and physical elevation. General sanitary regulations may have their influence, but so long as poverty, vice, and intemperance continue to dwell in holes and hovels, damp, filthy, and unventilated, so long must cholera in large cities continue to number its victims by hundreds and thousands.

3. *Nature and treatment of Asiatic Cholera.*

The undersigned regards the serous or rice water diarrhœa, which is the result of the epidemic influence, whatever that may be, as the essential and characteristic symptom and feature of Asiatic Cholera. If that is permitted to continue the blood is speedily deprived of its fluidity and rendered incapable of circulation and secretion, and the patient falls by unavoidable necessity into collapse.

Collapse is but a sequence of the real disease, which is the serous diarrhœa. This diarrhœa if timely taken in hand is very manageable. It requires nothing but rest, moderate doses of opium, and astringents, and bland nourishment. When cramps, asphyxia and collapse have supervened, it is another and very different affair. No specific for this phase of the disease has been or is likely to be discovered. The majority perish under any treatment. Gentle stimulation, warmth, friction, sinapisms, &c., will in a proportion of cases, succeed in rescuing the patient from his otherwise inevitable doom. Mercurials possess in this stage no curative power. By depressing the energy of the system they do much harm. Were it possible to place the entire population under medical surveillance, with the power to enforce its prescriptions, the mortality by cholera would be almost annihilated.

4. *What alterations in existing laws, and what new regulations, precautionary or sanative, are necessasy to prevent the diffusion of Cholera.*

Upon this branch of the subject, the undersigned must speak with extreme diffidence. His studies and investigations have not been in such a direction as to make him minutely acquainted with the already existing legislation on this subject, nor has he within his reach the means of prosecuting such an investigation. He has already expressed his opinion as to the futility and inefficiency of quarantine regulations. Perhaps the most important consideration bearing on this part of the subject is that in relation to the prevention and suppression of nuisances. The late sanitary committee of the Board of Health have in their report on the recent epidemic, (pp. 36 and 37) fully and forcibly expressed their opinion on this subject. Whether additional legislation is or is not necessary to carry out the views therein expressed, the undersigned does not feel competent to determine. Beyond question, in the 16th ward, where the epidemic raged with intense malignity, hundreds of lives fell a sacrifice to the noxious and putrid miasmas engendered by various local nuisances existing in that section. Bone-boiling and horse-killing establishments, glue and starch factories produce and disseminate effluvia, singularly disgusting and offensive to persons riding rapidly through the neighboring localities, how much worse for those compelled constantly to inhale them. How to protect the public health without infringing upon private rights, is a nice question even for experienced legislation to decide. The undersigned does not feel competent to venture an opinion. That some farther legislation is necessary cannot be doubted. Perhaps the establishment of some such board as hinted at in the report as above cited, would conduce greatly to a happy result.

In conclusion, gentlemen of the committee, the undersigned begs to state, that he has thrown together, hastily, such remarks and suggestions as presented themselves in answer to your inquiries. Should they conduce in the slightest degree to the object you have in view, he will feel himself amply rewarded.

Very respectfully submitted.

WM. J. BUEL, M. D.,
Late Physician to the Centre and 35th st. Cholera Hospitals.

Communication from A. Vache, M. D.

SIR—To your letter in relation to the "origin, progress, cause and treatment of cholera, together with what alterations or revisions in existing laws, and what new sanitary regulations my experience in the late epidemic may have suggested to my mind as necessary to prevent its diffusion," I can only make a very limited reply. To do otherwise, with so comprehensive a subject, would occupy pages of manuscript, considerable time for research, and more labor than my professional duties will allow.

The history of cholera, in which I shall include its progress, unequivocally traces its *origin* to Asia. It is noticed by Hippocrates, who lived several centuries before the Christian era, and by others, not many years subsequent to that event. It prevailed in London in 1669 and in 1676, and in Paris in 1630 and in 1780. In 1762, it is said to have destroyed in Upper Hindostan, thirty thousand natives and eight hundred Europeans, and from these dates to the present day, it has been with great fatality one of the endemical diseases of India, clearly described by talented and unimpeachable authors.

It was not, however, until 1817, when with other ravages throughout Hindostan, it decimated the army under the command of the Marquis of Hastings, encamped on the banks of the Sinde, that it assumed a *positive* epidemical form, and commenced its fearful and irresistible *migration* to the east, the south, the west and the north. To trace it on the Eastern Continent, from place to place and from period to period, as recorded by different writers, would scarcely come within the space allotted to a communication like the present, and I therefore shall confine any further observations to the invasion by it of this hemisphere, with a short detail of the course it pursued as it occasionally travelled from district to district.

The first appearance of cholera on this continent, was in Quebec, Lower Canada, on the 8th of June, 1832; it reached Montreal on the

10th, New-York on the 24th, Albany on the 3d of July, Rochester 12th, Troy on the 16th, Flatbush and Gravesend, L. I., on the 15th, State Prison, Sing Sing, on the 17th, Philadelphia on the 5th, Baltimore on the 22d of August, and the city of Washington on the 28th. It also prevailed in the large towns on the river St. Lawrence, and its tributary streams. It exhibited itself at Kamarouska, La Prairie, St. Johns, Buffalo,La Chine, Canghnawaga,Coteau de Lac, Chateaugay, Cornwell, St. Regis, Prescott, Ogdensburgh, Brookville, Kingston, York, Chambly, Plattsburgh, and Three Rivers. It visited Baltimore, Richmond, Norfolk, Edenton, Cincinnati, New-Orleans, and various portions of the Southern States.

To the east, a limited number of cases occurred in New-Haven, Newport, Providence and Boston ; at Newport it was unquestionably brought from the city of New-York.

During the time, thousands were attacked. The average mortality was about fifty per cent, and the general duration of the epidemic at the various localities, between two and four months.

In this connection it is important to note, that the brig Carricks arrived from Europe on the 3d of June, at the quarantine ground, Grope Island, thirty-nine miles below Quebec, with the loss at sea of thirty-nine passengers out of one hundred and thirty-three, by a disease which subsequent events established to be the one under consideration.

The two first cases at Quebec and Montreal, were immigrants, landed from the steamboat Voyageur, which plied between the two places, and which was employed to convey persons from emigrant vessels anchored in the river.

In 1833, the disease commenced in February, at Havana and Mantanzas, and prevailed for several months with great severity : the deaths in the former place reached upwards of ten thousand in a population of about one hundred thousand, including in the melancholy catalogue, the American consul, William Shaler, Esquire, and the acting bishop, Pedro Valeria Y. Ximenes.

In June and August it invaded Tampico, Campeachy, Vera Cruz and the city of Mexico. In Central America it attacked the army, and destroyed large numbers of the officers and men.

In the United States, at the south, it appeared at Apalachicola, and at Amelia Island on the coast of Florida; at Mobile, Wilcox county, Montgomery, Tuscaloosa, Williamsport, etc., in Alabama; at Vicksburgh, Natches, Claiborne, Jackson, Portage des Sioux, ect., in Mississippi; at New-Orleans, St. Martinsville, Thibodeauville Franklin, Baton Rouge, Alexandria, Contrells, etc., in Louisiana, and at Brazoria, etc., in Texas.

In the Western States, it was at Helena, Little Rock, etc., in Arkansas; at Nashville, Pulaski, Memphis, Simsonville, Shelbyville, Effingham, Beach Grove, etc., in Tennessee; at Maysville, Flemingsburgh, Georgetown, Lawrenceburgh, Lexington, Lancaster, Paris, Blue Licks, Millersburg, Frankfort, Bardstown, Cynthiana, Greene county, Mt. Vernon, Danville, Jacksonville, etc., in Kentucky; at Alton, Carrolton, Quincy, Rushville, Galena, etc., in Illinois; at Williamsport, Salem, etc., in Indiana; at Cincinnati, Steubenville, Bridgeport, Belmont county, Zanesville, Jackson, Gallipolis, Senecaville, Chilicothe, Richmond, Fulton, Dayton, Lebanon, Columbus, ect., in Ohio; at Allegany, Pittsburgh, Brownsville, Claysville, etc., in Pennsylvania, and at Hagerstown, etc., in Maryland. It also appeared at Wheeling, Fredricksburgh, Charlestown, etc., in the northern parts of Virginia.

In 1834, it again made its first visit at Quebec and Montreal, and from thence spread to the country parishes throughout the whole course of the St. Lawrence. It prevailed severely at La Chine, Kingston, Prescott, Ogdensburgh in this State, opposite Prescott, at Toronto, and amongst the villages on the north side of Lake Ontario. The village of Galt, U. C., was nearly depopulated. In Nova Scotia, it was very violent at Halifax, and extended to St. Johns.

In the State of New-York, it exhibited itself in the villages on the south side of Lake Erie, at Buffalo, Rochester, Salina, Albany, Poughkeepsie, city of New-York, Brooklyn (L. I.), Staten Island, &c.

In New-Jersey, at Bergen hill and at Newark. In Pennsylvania, at Williamsport, on the line of Schuylkill canal, Port Carbon, Beaver, and Washington county. In Maryland, there were a few cases at Baltimore; and three or four in the District of Columbia. In Virginia, at Wheeling, Richmond, and Petersburgh. In Ohio, at Cincinnati, Butler county, the Miami country, and the townships of Columbia, Anderson, and Fulton, at Huron, Lower Sandusky, and Cleveland. In Michigan, at Detroit. In Kentucky, at Mill's point, the mouth of Sandy river, and Princeton. In Mississippi, at Rushton. In Illinois, at Luzerne and Pekin. In Texas, at Austin's and Power's colonies, in the towns of Labride and Willaugh, and as far as the river Lavacca. In Florida, it was at Amelia Island and at Pensacola, at which place it was introduced by the United States ship Falmouth. In Georgia, it was at several places on the Savannah and Ogeechee rivers. It also made its appearance at Jago, Island of Cuba.

In 1835, in Tennessee, there were cases at Nashville, Memfreesborough, Franklin, north side of Duck river, in the neighborhood of Jefferson, Williamsport, Memphis, in the neighborhood of Jackson, and at several towns, and on board of the boats, on the Ohio and Mississippi rivers. It also continued on the Savannah and Ogeechee rivers, and prevailed to some extent on the Rio Grande.

In 1836, it for the first time appeared in Charleston, S. C. During the previous years it had not approached that city nearer than Edenton on the north, Savannah river on the south, and Folly Island, off the mouth of the harbor. At this last place, it was undeniably attributable to the stranding and loss of the brig Amelia, the 31st October, 1832, bound from New-York to New-Orleans, and on board of which were cases of the disease. From the wreck, and the passengers and crew, and their effects landed from that vessel, it immediately extended to the few negroes inhabiting the island, to the men employed in saving the cargo, to the physicians and nurses sent to attend to the sick, and to the city guard, detailed to enforce the quarantine. The mortality was extreme.

With the epidemics of 1848 and 1849, every person is familiar. To continue, however, in chronological order the recurrence of this destructive disease, it becomes necessary to devote a page or more to the sad reminiscences of those years.

On that occasion, the first introduction of the malady was in the port of New-York, at the quarantine ground, Staten Island, by the packet ship New-York. She sailed from Havre, then healthy, on the 9th of November, with three hundred and eighty-five French and German steerage passengers, twenty-one cabin, and a crew of thirty men. According to the statement of the commander, Captain Lines, all handa remained well until the sixteenth day out, and the vessel was in lat. 42°, long. 61°, Sable Island bearing about 140 miles S. S. W., when, owing to the coldness of the weather, there was a general overhauling of chests in search of warmer clothing, and the first cases occurred. At the time of her arrival, on Friday night, December 1st, seven of the steerage passengers had been buried at sea; and on the 2d and 3d, eleven were landed sick at the lazaretto, and put in the hospitals on the hill. Seven of them died. The remainder, in apparent health, were ordered on shore, and were lodged in the "public stores," belonging to the United States. From these buildings the disease spread to the hospitals, and prevailed in both until the 28th of the month. In this time, upwards of one hundred were attacked. The mortality was about one-half. It is alleged, and probably with truth, that several of the passengers were indirectly from Bremen, where cholera prevailed.

In April, the disease reappeared in the stores; and in May, in the hospitals. From the 18th of April to the 15th of August, there were one hundred and ten deaths. During the period, forty-one persons with cholera were received from the shipping. Several fatal cases occurred on different parts of the island.

In the early part of December, two cases exhibited themselves in this city. The first was an individual from quarantine; the other was a person who had occupied the same room in the boarding house. Both were fatal.

With these exceptions, the first persons attacked in New-York was on the 11th of May, 1849. It occurred in Orange street, and was soon followed by six others who resided in the same premises. From that point, the disease gradually spread from ward to ward, and continued with more or less intensity until the last of September. The number of deaths was 5,017. The nearest vicinity of the pestilence was the quarantine, between which and the city there was constant intercourse by the residents of each place; and, in most instances, the passengers from sickly vessels were permitted to disembark at the wharves with their unventilated baggage. If the infection was not ascribable to these causes, it could not be traced to any other.

In Brooklyn, L. I., it manifested itself about the 26th of May. In Williamsburgh, L. I., on the 29th. In Jamaica, L. I., on the 4th of June, and about the same period at Bergen and Newark, N. J.

It prevailed at Albany, Troy, on the line of the Erie canal, in Chicago, and Buffalo. In Montreal, the deaths were 499; in Quebec, to the 23d of August, 943; and in Toronto, to the 9th of the same month, 380.

At Boston, Mass., the bark Argyle arrived on the 4th of June, from Scotland, with cholera on board; and cases are said to have occurred in that city from that time. From the 29th of June to the 13th of October, however, the deaths were 602. In several other cities and villages of New England, the disease prevailed.

In Philadelphia, eight cases were announced on the 22d of May. The number of deaths accurately reported from the 2d of June to the 22d of September, was 1,022.

In Baltimore, it was reported on the 22d; in Norfolk, Va., on the 29th, and in Richmond, Va., on the 30th of May, the Legislature of which adjourned to Fairquer Springs.

At New Orleans, like at Staten Island, the cholera appeared in December, and under similar circumstances. The two first cases sent to the charity hospital were from the ship Swanton, from Havre, on board of which the disease manifested itself when about two weeks from port. Thirteen bodies had been thrown overboard. Her passengers were also composed of French and Germans, and the latter were recently from their own country. From that source it spread to the shipping, to the river boats, and over the city. The number of deaths from the 11th of December to the 7th of February, was nearly twelve hundred, when the boards of health pronouced the epidemic at an end, and ceased to report.

The disease visited Vicksburg, Cincinnati and several other places. On the 8th of January it was at Memphis, and on the 17th at St. Louis. It also appeared at Mobile, and in a severe form in Texas. At Fort Lawson, forty deaths occurred in one night among the troops.

Subsequently, the malady resumed its fearful strides in New-Orleans, and in Cincinnati, and continued several months. It prevailed throughout the valley of the Mississippi with sad havoc on the plantations, and extended itself to Indiana and Illinois. At St. Louis its duration and violence was unsurpassed on this continent, and in Texas it raged with unabated and destructive fury.

Amongst the victims, was the chivalrous Worth, the brave Duncan, the gallant Yates, and the veteran Gaines. Invulnerable to the balls of an enemy while leading their victorious columns on the field of battle, they were suddenly and remorselessly stricken to the earth by that unrelenting and desolating foe to the human race. A nation's tears bedewed their graves. Peace to their ashes!

At present it is on Ward's Island—the home for destitute, invalid and sick immigrants. The proximity of that institution to the city of New-York; *the recurrence of cholera in this country, with the return of it to Europe*, and the probability of the spread of it from these sources, demands the prompt adoption of every available means to prevent so serious a catastrophe. It has also commenced its march in Louisiana, and will doubtless again overrun the valley of the Mississippi and the shores of the Ohio.

The cause that produces cholera is not known. By some, it is said to be atmospheric; by others, meteoric, telluric, electric, animalculæ. To reiterate the speculations on the subject, would be more curious than useful. Each writer has imagined the premise from which the fact is assumed, and the supposed fact has invariably been made to conform to the fancied premise. That it is a *specific* poison, would be difficult to confute. Its effects on the human system, unlike every thing else ever beheld, seems conclusive evidence of the correctness of the problem.

The treatment of cholera, has been as various as the opinions of medical men on the nature of the disease. More obscure than any other malady presented to the consideration of the profession, each member of it seems to have framed his ideas agreeably to the hypothesis derived from his opportunity to investigate, and his ability to judge. As one of the number, I have pursued the same course, and while I avoid any reference to the views of others, I do not decline to furnish you with the conclusions I have reached, based on experience at the bed-side, during the epidemics in this city of 1832, 1834, and 1849.

In my opinion many of the phenomena, and the immediate cause of death in cholera, are to be attributed to the *disintegrated* condition of the blood, from the direct loss of serum poured out of the capillary vessels into the alimentary canal, and subsequently ejected, in most instances, from the body. Chemical analysis of the discharges has abundantly established the fact, and venous saline injection, by its instantaneous effects on the circulation, has synthetically confirmed the truth of the proposition. The first indication, therefore, is to suppress the loss of that fluid, in order to retain, as long as possible, sufficient vital energy for the action of other remedies on the system. For this purpose astringents are the only agents. Various have been recommended, and I have fairly tested the efficacy of each. To the vegetable combinations I gave a decided preference, and from tannin, in five grain doses, diffused in half a wine glass of water, I derived the most satisfactory results. Ice, so generally used, produces similar effects. Independent of alleviating the intolerable thirst, its temperature contracts the muscular tissue of the prima viæ, and closes in proportionate degrees, the mouths of the secerning vessels.

Next, and equal in importance, is the necessity to incite the liver to action, as speedily as it can be accomplished by the administration of cathartic medicines. With me, twenty grains of calomel, blended with one grain of powdered opium and a grain of powdered camphor, succeeded the best.

After a satisfactory trial of many others, in these remedies I placed the utmost reliance. If rejected they were repeated, for when retained by the stomach, and bilious evacuations were obtained from the bowels, little else remained to be achieved, in most instances, but to guard against relapse by *cautious diet* during the period of convalescence. When other diseases supervened, they were treated in accordance with the type, the condition, and the habits of the patient.

External applications, I have looked upon as mere auxillaries. As such, they are of some importance; but in themselves, of very little value. For profuse perspiration, no agents have equalled the free application, in Indiarubber bags, of very cold water to the skin; and for cramps, none have exceeded the use of tourniquets, without the strap pad, sufficiently tight to interrupt the *superficial venous* circulation in the limbs. Iced, "Congress spring" water was a grateful drink, and valuable for its saline and alkaline properties.

The above remarks, it must be understood, are alone applicable to cholera when it presents unmistakeable evidence of its existence, by the *more* or *less* alteration of the countenance; the clammy moistness of the skin; the slowness and feebleness of the pulse; the huskiness of the voice; the coldness of the tongue; the corrugation and lividness of the hands and feet; the spasmodic action of the muscles of the abdomen and extremities, and the "rice water" discharges from the stomach or bowels.

In the earlier stage, with simple diarrhœa and excessive lassitude, diffusible stimuli composed of laudanum, spirits of hartshorn, essence of cloves and peppermint, tincture of Cayenne pepper, and spirits of camphor, followed by calomel, if necessary, are all, in most instances, that is requisite to put a speedy termination to the attack.

At the several times the "health laws" of the State underwent revision by the Legislature, no reference was had to cholera unless in 1832, when a special act was passed to meet the occasion, and which expired, if I understand section 10 correctly, by its own limitation with the year 1833.

In reading over, however, the law as it *appears* to stand, for it is very difficult to say what portions have been repealed by subsequent acts transferring the "marine hospital" to the Commissioners of Emigration, it seems to me that the alteration of a few words and the addition of a few sections are all that are required to render it more protective without being additionally oppressive.

With this view, I have marked in the annexed copy of the law, as published by the commissioners of health in 1846, the amendments I suggest.

I also advise the separation of the quarantine from the institution provided for the protection of the immigrant. Between an establishment for the care of individuals in health, and with ailments harmless to others, and a lazaretto for the reception and detention of persons with pestilential and contagious maladies that endanger the lives of a community, it is difficult to discover any affinity, or to adopt any rational idea why the connection should exist. As it is, singular as it may appear, the board of health have control over the local sanitary laws of the county, with the exception of the important appointment of health wardens, who are selected by the chief of police, while the Commissioners of Emigration have possession of the hospitals and grounds on Staten Island, from whence the safety of the city of New-York from imported diseases is to be derived. With such an extraordinary admixture of departments, and divisions of powers and responsibilities, the results, it seems to me, cannot fail to be disastrous in its consequences to the public.

In my judgment the "marine hospital and its fund," in order to fulfil the intentions of their creation, should be as the wise heads and pure hearts, governed by the experience of years, originally made them—a direct unencumbered branch of the medical police of the State, and immediately under the jurisdiction of the authorities of the city and the commissioners of health, who are alone competent, from position, to meet the exigencies that momentarily arise. How to accomplish that object, in full, in accordance with the decisions of the Supreme Court of the United States, is the province of a lawyer, not of a physician, to explain.

The mountain heretofore raised in relation to economy, or rather whether epsom salts can be purchased for one or two cents a dose, never can be worth the notice of enlightened men, especially when the prosperity and health of a population comprising millions, are under consideration.

Before leaving this branch of the subject, I deem it a duty to recommend the removal of the quarantine from its present location to a more distant site, if one can be procured that shall afford *a harbor for the anchorage of vessels*, and sufficient accommodation *for the safe detention*, and *purification of passengers and their baggage*, when circumstances demand it. With any other disease than cholera this perhaps would not be immediately necessary; but when the population of Staten Island—its proximity to the city—the constant unavoidable commingling of the inhabitants with each other, and the facility and rapidity with which the virus is conveyed, are taken into consideration, the conclusion is self evident that much greater security must arise from a more isolated and better ventilated position.

When this is done, and the law as amended in 1846, with trifling alterations is restored to the statute book, and *published in one act that it may be understood*, all, probably, will have been *practically* obtained by the authorities of the State, that is within the power of the wisest legislation to devise, short of non-intercourse with infected countries, divided by seas of thousands of miles in extent.

The prophylactic measures adopted against the accession of cholera, it must be admitted, have hitherto been futile. Military and civic cordons of the strongest kinds have been instituted, and quarantines of the most rigid character have been established without avail. Governed by special, though inscrutable laws of its own, its independent march over vallies and mountains and oceans, *regardless of climate*, has defied the most energetic efforts of human wisdom to control. That the disease, however, is *indigenous* to India, no one can dispute, and that it *radiated* from that point over the habitable globe, few will deny. Be the cause that produces, therefore, what it may, there cannot be a doubt that it is *transmittible* from hamlet to village—from town to city—from country to country—and from continent to continent. Take for example, the invasion of Quebec and Folly Island in 1832, and who will question that the poison did not emanate from the brigs Carricks and Amelia, and the baggage of their infected passengers and crews? Look at the ship New-York, at Staten Island in 1848, and who will seek any other source to explain from whence the pest was derived? Remember the ship Swanton, in the same month and year, at New-Orleans—the bark Argyle at Boston in 1849—and the myriads of steamboats on the northern and western rivers, and what greater proof can be required to establish, that from these nuclei the malaria was disseminated in North America, dealing misfortune and death from one extremity of it to the other.

It has been observed, that cholera primarily selected the vitiated and depraved members of society, and sought its victims to a greater extent in low grounds and filthy localities. However true that may be, it is very questionable if the result arose from any other cause than the greater susceptibility of that class to receive the impression of a poison. If impaired health, personal degradation, crowded dwellings, abject penury, and an atmosphere loaded with animal and vegetable putrefaction, were the only pre-requisites for an attack of the disease, the lapse of time between the years 1834 and 1849, could not have occurred in the city of New-York, especially in the "Five Points." An interval of fifteen years, under precisely the same local circumstances, surely requires some other explanation to account for the presence or absence of the epidemic.

That the malignancy of the disease, however, may be mitigated by judicious local regulations, and due observance of personal habits, cannot be contradicted. To accomplish that object, the most reliable means are the purification of the streets, yards, privies, gutters and sewers, by the removal of all offensive matter, and the free use of water and other agents; cleanliness of person; strict precaution against transitions from heat to cold; regularity in the mode of living; avoidance of indigestible food, and excess in the use of malt or alcoholic drinks; due regard to change of clothing with alterations of weather; pecuniary and other aid to the indigent; the organization of hospitals for the speedy reception of the sick; and of dispensaries for prompt advice, and gratuitous distribution of medicines; the timely appointment of *capable* ward physicians, to visit those who are unable to pay for professional services, and an admonition to the public to discard all nostrums, and reject all preventive remedies.

With proper attention to these recommendations, the predisposition to the disease may, at least, be allayed, and the violence of its assaults greatly subdued; but in the practice of them, it is equally necessary to avoid sudden and decided changes in the habits of individuals, for no fact can be better established than the injurious tendency of immediate revolutions in the nervous system during the prevalence of an epidemic, and no greater exciting cause can be induced for the attack of thousands with the malady who otherwise might escape.

The burial of the dead in *deep* dug graves is preferable to vaults. The decomposition of the body under ground, is far less objectionable than in tombs,—the air of which, when opened from time to time, is diffused through the atmosphere, and cannot fail to have a deleterious effect on those within its influence.

Whether cholera is contagious or non-contagious, is difficult to determine, if personal communicability alone be understood by the words, the evidence presented by the advocates of either side is so evenly balanced, that time alone can distinguish the right from the wrong. My own observation has been confined to localities where it prevailed in an epidemic form, and where all persons were alike subjected to the impression of the general cause, in a greater or less degree, independent of any connection with the sick. For me, therefore, to express an opinion on so doubtful a point, under circumstances where it was impossible to distinguish from which source the disease was derived, would be to place myself in the *conjectural school*, with about equal claim to the correctness of my views.

In closing these remarks, sir, I avail myself of the opportunity to say, that I sincerely hope that others with far greater knowledge, may point out more positive and effective measures to protect the citizens of this otherwise healthy and prosperous country, from the devastations of a scourge, the terrific offspring of a far distant land.

I have the honor to remain, sir,
Your obed't serv't,
ALEX'R F. VACHÉ,
No. 75 Lexington Avenue.

To the Hon. C. D. Robinson,
Chairman Stand. Com. Med. Soc. and Col. in Senate, Albany.

Communication from Professor A. C. Clarke.

New-York, March 14, 1850.

To. Hon. C. D. Robinson,

Chairman of Com. on Medical Societies and Colleges:

Dear Sir—The diseases which occur in this State, properly denominated "malignant or infectious," are eight in number, viz: typhus fever, scarlet fever, small pox and measles, which are commonly believed to be communicable by contagion; an epidemic form of dysentery, and epidemic erysipelas, which often merit the epithet "malignant," though they are not usually regarded as contagious; *Asiatic cholera*, which in its triple visitation, has among us, as elsewhere, caused a wide-spread mortality, entitling it to be considered the most terrible of all the plagues the world has ever seen; and yellow fever, which, however, has appeared among us but once, (and then hardly as an epidemic) for more than a quarter of a century A contagious or infectious property has sometimes been claimed for all these, but it is in favor of the first four only that claim is generally conceded, although the malignancy of the remaining four is fully attested by the severity of their symptoms, and their too often rapidly fatal termination. There are other diseases which, either from their fatal tendency, or their contagious character, are not far removed from those here named; but it is believed that they are not strictly entitled to a place among the diseases referred to the consideration of your committee.

Among these, however, is one which I am not willing to pass without a brief notice. I refer to the *malarious remittent fever*, which, although it is not usually called malignant, (and is certainly not contagious) destroys annually, in different sections of the State, many valuable lives. The agent which produces miasmatic fevers, is universally believed to be some emanation, during the warm seasons, from marshes and from alluvial soil, newly brought under cultivation. The remedy is found in tillage and drainage, and it is gratifying to learn that certain places which, only a few years ago, were rendered almost uninhabitable by the prevalence of miasm, are now, by the enterprise of our agriculturists, wholly relieved from the influence of this cause of mortality. So much of *this* remedy, then, as can be effected by the cultivation of the earth, will be slowly but surely accomplished by the farmer; but effectual drainage is often a work too great for him to achieve unaided. Many low and wet lands within the State now lie unproductive, and worse than useless, exhaling poison, creating diseases, and from their extent, and their unfavorable position as regards drainage, must long remain in this condition. How far the Legislature can judiciously extend its aid to reclaim these insalubrious wastes, I have not the means of forming an opinion. The absence of all sources, from which extensive and reliable information on this important topic can be obtained, seems to me one among the many strong reasons which might be urged for a *sanitary survey of the State.*

With reference to the diseases especially submitted to the consideration of your committee, I would remark: first, regarding *epidemic dysentery* and *epidemic erysipelas*, as they are not generally considered *contagious* affections, and as their causes are in a great degree unknown, I am not able to suggest any plan by which legislation can materially mitigate their severity or limit their spread.

Secondly, regarding *scarlet fever* and *measles*, although they are contagious diseases, and might in this view seem to require isolation no less than *small pox*, yet when it is remembered that the sufferers from these diseases are mostly persons of tender years, dependant wholly on parental care, society has perhaps wisely preferred to trust to parents for such seclusion as can be secured in their own dwelling, and to leave every thing to the promptings of their love for their offspring. The time may come, when discoveries analogous to that which has rendered the name of JENNER immortal, will deprive these affections of their fatal power, but till then they will probably be regarded as among the unavoidable perils of childhood; and those will be congratulated who have safely escaped through the perils, rather than those who have not yet been called to endure them.

With regard to *typhus fever*, I would remark, (assuming that if yphus and typhoid fevers, if they are not substantially modifications of the same disease, at least are closely allied in their origin and progress,) that though it attacks all classes of persons, it is most prevalent and most malignant in large towns, among the poor. The total mortality from this disease, in every country where it prevails, through a term of years, far exceeds that produced in those countries by the occasional ravages of Asiatic cholera. Like cholera, it is most fatal in over-populated, ill-ventilated dwellings; among those who are poorly fed and poorly clad; where filth of any kind is allowed to accumulate. It is a disease, which in all temperate northern latitudes, follows the scarcity of food, and has occasioned the fearful collocation, "famine and pestilence."

From these facts it will appear that legislation, if it aims at the removal of this cause of mortality, must first improve the social and domestic condition of the poor; provide for them airy and comfortable dwellings, and abundance of wholesome food, and early remove the sick from among the healthy. But this is a great work, beyond the ordinary range of legislation.

To educate the poor, to encourage industry of every kind, so that they may procure for themselves commodious dwellings and the means of comfortable subsistence; to offer asylums to the destitute, the helpless and sick, has thus far been considered the whole duty of good government. Whether more than this can now be done, I am not prepared to say. The hospitals provided for large towns have no appreciable influence in stopping the progress of fever. The infected are not invited to them. Indeed, the project of diminishing the mortality from this cause, by isolating the sick, seems not to have been earnestly proposed in this country, much less attempted. There is not a proper fever hospital in the State. That such hospitals should be established, and on a basis so liberal, as that dispensary and other physicians may be led to encourage the sick poor to resort to them, not less to increase their own chances of recovery, than to relieve their friends from the danger of infection, I fully believe. Older governments than our own, have had this subject long under consideration. Some of the most distinguished physicians of Europe have urged it as the only practicable means of moderating the ravages of this too fatal disease, and the plan has been partially adopted in many of the cities of Europe, with beneficial results; but nowhere fully; yet nowhere has less been done than in our own country. I am aware that such a project as this would be impracticable in the midst of an epidemic, like that which decimated the poor of New-York city in 1837 and '38; but it remains to be shown that the plan of isolation here advocated, would not render such epidemics impossible. Yet these institutions should not rely entirely for support on the State treasury. Local authorities have a duty to perform in this matter, and at the same time, it may be well considered, whether the public good does not require that they should receive encouragement and liberal aid from the State.

Regarding *small-pox*, permit me to suggest, that so great have been the benefits of vaccination, that that disease has almost ceased to attract public attention, or to excite alarm. Yet it is not extinct among us. In the year 1848, the deaths from variola and varioloid in the city of New-York were 585, or 1 in 28 of all the deaths. In this city it is a constant visitor, and in all our large towns it is a frequent visitor, while it occasionally alarms the most secluded villages and towns in the State. The malignant and highly contagious character of this affection has, from time immemorial, in all civilized countries, been held to justify even the forcible removal of the infected to some safe and proper retreat. I do not discover, in the laws defining the "rights and duties" of towns, any provision by which this important sanitary measure can be effected.

A severe epidemic of this disease has not occurred within the limits of the State for very many years, and it is believed, that with the idea of security that has grown out of this fact, the practice of vaccination has of late been alarmingly neglected. England, Germany, France, and indeed most European countries, since 1828, have been repeatedly and severely visited by it. Our turn may come when we least look for it. The disease is never absent from the State, and when the circumstances will occur which will render it epidemic, no one can know. Recent investigations have shown, that while successful vaccination in infancy affords a seasonable protection till the age of puberty, re-vaccination is necessary after that period, either to test the value of the former vaccination, or in a large number to renew the weakened influence of the vaccine virus.

I have reason to believe that while vast numbers of our population are yet without the security which a first vaccination affords, only a small proportion, and those chiefly inhabitants of cities, have availed themselves of the still higher protection furnished by re-vaccination. This is a legitimate subject for legislation, as is also the isolation of those suffering from small-pox, by hospital or other provisions. But I am restrained from making specific suggestions, lacking that accurate information on which alone such suggestions can be safely based—information that can only be furnished by a sanitary survey, or by a census embracing some of the objects of a sanitary survey.

Yellow fever and *cholera* remain to be noticed. Of the former I will only remark, that the experience of former years seems to have demonstrated that it may safely be left to the management of an intelligent board of health, in the town affected; fully empowered to act in all things as circumstances may seem to require; and should that disease again visit our shores, I believe the Legislature will do all that the public good can require, if it provides, by general law, for the creation of such boards in places either threatened or attacked, empowering these boards both to enforce internal sanitary measures and quarantine, where quarantine is not already provided for. Regarding cholera, I believe it to be proper to extend my remarks to somewhat greater length.

From the obscurity that rests on many important points in its history, the praiseworthy labors, thus far bestowed by medicine men, have been but partially rewarded, for nature still holds secrets regarding the origin and spread of the cholera, which, if fully known, would reveal, not to the physician only, but to the legislator, his duty as guardian of the public health. But while indulging in this tone of remark, I do not forget that there are some reasons for supposing that the cause of epidemic diseases in general may have been hidden beyond the research of man. This, at least, is certain, that many diseases of this class have been known and carefully studied for many hundred years, and yet little more is known of their origin and diffusion, than is now known regarding this last and most terrific of the maladies entitled to this name. When, then, it is remembered that cholera, in its triple visitation, has scarcely been the subject of study, in the majority of towns attacked by it, in Europe and America, for a total period of nine months, is it not rather a subject of congratulation that so much has been learned of its nature, progress and treatment, than of surprise that so much remains unknown?

Cholera has been ascribed by different persons to *animalculæ*, floating in the air or living in the water of infected places; to minute vegetable substances of the class "*fungi*" pervading the air and water; to a substance called *ozone*, diffused through the atmosphere; and to the withdrawal of a portion of the electricity naturally belonging to the human frame, by some telluric influence I have investigated the bases on which each of these opinions rest, and though it is beyond my province to assert regarding any one of them, that future inquiry may not demonstrate its truth; yet I confidently believe that at present, neither of them is sustained by such a number of well observed and uncontradicted facts, as should entitle it to any consideration in searching for a foundation on which to construct wise sanitary laws.

The two opinions which share the divided support of the great body of the medical profession, and of the public, are that it originates from atmospheric causes, or from contagion. The great question then, is, whether cholera is or is not contagious? At first view it would seem that such a question ought to be satisfactorily answered by an appeal to facts. But if the atmospheric origin of the disease be admitted as possible, and if at the same time an accessary influence from local causes be admitted, (and at this day such influence is nowhere denied,) it will be seen that almost all the cases which can favor the views of the contagionists, will at the same time, admit of an interpretation equally favorable to the opinions of those who reject this doctrine. Thousands of instances could be cited in which the disease has been carried from an infected to a healthy region, or has originated in a place previously healthy, and has not extended beyond the individual primarily attacked; so, that the contagionist is compelled to admit that the disease is not uniformly and equally contagious under all circumstances. Yet, on the other hand, its spread in many instances is so analogous to that of affections universally recognised as communicable, as to induce the non-contagionist to entertain respect for the views of his opponent, and even to excite in him temporary doubts of the correctness of his own opinion. A volume might easily be filled with recorded facts, which, viewed separately, would seem conclusive for the opinion of either party. This difference arises then, not so much from any want of acuteness, or honest judgment in the minds of the observers, as from the intricate and apparently variable phenomena involved in the inquiry. I am ready to express the conviction that cholera is not contagious. I believe that in this conviction I am sustained by a large majority of the medical profession, both in this country and in Europe. I believe that the spread of the disease is essentially dependent on an agency of unknown origin; often widely diffused; affecting frequently large communities—even whole countries, at nearly the same time; producing however, only, in most instances, what has been called a "predisposition," which persists in some persons only a few days, in others for many weeks, awaiting in most the influence of some accessary cause, either local or personal, to produce the full development of its terrible energies. On this opinion I am willing to act, in all that concerns my own personal interests and welfare; yet I entertain so profound a respect for the opinions of the many great and learned men who differ from me, and honestly and intelligently hold the doctrine of contagion, that I would hesitate to put the interests and the welfare of the public at hazard, on what may possibly prove an erroneous inference, from facts which now appear to me conclusive.

The question fortunately admits of definite settlement, and it will not be long before all will concur in one opinion, either for or against the doctrine of contagion. The State Medical Society at its last meeting, appointed a commission to investigate this subject, in the light of new facts to be collected in our own country. From their labors, results important alike to the physician and the legislator may be expected. I would give all encouragement to every inquiry that may tend to develope the specific cause of cholera, and ascertain the laws of its diffusion, and would advise appropriations of money to aid such investigations, whenever they are believed to be judiciously conducted and require such aid.

I now turn from these debatable topics, to facts regarding which, there is no dispute, and earnestly call your attention to the acknowledged *accessary causes* of malignant cholera. Whether the disease be contagious or not, all who have witnessed its progress agree that it expends its greatest violence in low, damp, and unclean places; in ill-ventilated and crowded apartments; among the poorly clothed and the badly fed; among the dissolute and miserable; where filth of any kind is allowed to accumulate, whether within or near to dwellings; where pools of foul and stagnant water are permittted to collect; where open drains or putrid city streams taint the air; where the ebbing tide leaves the fœtid accumulations of docks to putrify in the sun; where marsh miasm has undermined the constitution of the inhabitants; among those who are exhausted by excessive and untimely labor; among those who are guilty of excess or imprudence in eating or drinking; about unclean butcheries, filthy manufactories neglected stables for domestic animals, and among those who are compelled to drink hard or otherwise impure water. Here are acknowledged causes of mortality, many of which the law can control and remove. Here then is the proper sphere of legislation. Whatever is the essential cause of cholera, here are the superadded influences, which render it so terribly mortal. And I ask for these facts, although they have been many times stated, and are generally believed, the legislative sanction for the support of those municipal officers, throughout the State, who perform their duty on the one hand, and on the other rebuke those who neglect it. With this important object in view, I have no fear of being considered unnecessarily prolix, if I make a few citations and refer to a few facts, which sustain my opinions. "The British and Foreign Medico-Chirurgical Review," says, in July 1848, "the poison of cholera derives its terrible power, chiefly, if not wholly, from accessary circumstances." In January of the present year, the same journal alludes to the sentence just quoted, and adds, "Cholera has now passed over us, (again,) and we are more than ever convinced of the truth of this opinion."

The man in all England, who has a position that enables him to take the widest and most accurate views of the causes and progress of all forms of disease, is the registrar general. This officer, in summing up the ravages of cholera during the last summer, says, "cholera is a *health inspector* that speaks in language which nobody can misunderstand; it visits the prisoner in the hulks, on the polluted river; the neglected lunatic in his cell; the crowded work-house; the establishments for pauper children; the sides of stagnant sewers; the undrained city; the uncleaned streets. *The oversights, the errors, the crimes of persons who, in responsible offices, have charge of the health and life of men, are proclaimed aloud by its inexorable voice.*" These are words of heavy import, and should be written on the memory of every municipal officer, that he may perpetually feel the vast responsibility of his station, when the public health is threatened.

Statements of the same tenor as those just quoted, occur in every country, and every region that has been visited by the epidemic. Every sanitary report that has fallen into my hands, if it records unusual fatality from cholera in any particular locality, has also found local causes which were believed to account for such unfortunate results. They recognize everywhere the fearful influence of the accessary causes. Thus the report of the New-York sanitary committee, for 1849, declares that "among the important facts which appear to be well established, is this, that the agency of various exciting causes is generally necessary to develope the disease (cholera.) Among these causes the principal are the existence of filth and imperfect ventilation, irregularities and imprudences of living, and mental disturbance." The Philadelphia report for the same year fully recognizes the influence of "local circumstances, as filth, dampness, vitiated air, decomposing animal and vegetable substances, crowded and illy ventilated dwellings, bad drainage and sewerage, noxious gases, and other baneful agencies." Pages might easily be filled with extracts corroborating these statements, and nowhere has a doubt been hazarded of the fearful agency of these "local causes." The voice of the affected world is unanimous.

In the city of Philadelphia, as early as December 13, 1848, orders were given to proper officers, "That they visit all houses, cellars, yards, school-houses, factories, slaughter-houses, streets, lanes, alleys, courts, and all other places within their respective districts, for the purposes of examining thereon any nuisances tending to affect the health of the citizens, and to report thereon." By the first of April the sanitary agents had completed their visitation. "It would be impossible," says the report, "for the board to enumerate the causes of insalubrity discovered by them. *Foci* of unhealthy atmosphere and disease were found within and adjoining the premises, not only of the poor, but of those whose condition in society would place them far above suspicion." All these sources of disease were promptly removed. The city acted on "the principle that 'prevention is better than cure.'" The result of all these precautionary measures was that when the plague actually appeared, (on the 30th May,) its duration was limited to 81 days, and its destruction to 747 deaths, in a population estimated at 350,000. This is a mortality of 1 in 470 inhabitants.

In New-York it does not appear that any extraordinary protective measures were adopted in expectation of the epidemic. The sanitary committee was not even appointed till the 16th of May, two days after the first case of cholera had appeared in that city. On the 21st of May the sanitary committee visited that section to which the disease was then confined, (the "Five Points,") and they say, "to be appreciated the place must be seen;" "to those of the committee who visited the place for the first time it seemed almost impossible that such a state of things could exist in any portion of our city. In addition to what had been previously done, *orders were now given, and efficient measures adopted to cleanse this place.*" New-York then, unlike Philadelphia, had not duly heeded the warnings it had received in December, nor yet the frightful devastation the disease was effecting in the west; but it awaited the actual visitation of the pestilence to undertake a work which should have been completed long before. The plague lingered for 143 days, and 4,017 deaths are ascribed to it, and nearly 1500 deaths more than in the preceding year, occurring from bowel complaints, are reported under other names. If the population of the city for 1849 be estimated at 420,000, this will show 1 death from acknowledged cholera in every 84 of the inhabitants, or adding the deaths which were in all probability produced by the same agency, nearly 1 in 64. Making every fair allowance for the great emigrant population of New-York, I am compelled to view this contrast as striking, and instructive. But if these facts stood alone, I would willingly believe that the inference deducible from them is an unfair censure on the city of which the whole State is justly proud. But so far as facts are known, this is but a part of the history of cholera in every country which it has visited Were details necessary, I could refer to the city of Boston, which, in 1832, while cholera was gradually approaching through Canada, was energetic in removing all accessary influences, so that before it appeared in New-York, a newspaper announced that "if this enemy of man chose to visit the capital of New-England he was welcome, but that he would not find in the whole city filth enough for a single breakfast." The result was, that though several imported cases proved fatal there, Boston had to record less than a hundred that were indigenous; yet Boston did not escape in 1849.

They might refer to towns unfavorably situated, that by timely sanitary measures have escaped without a death; and to others having every natural advantage, which, trusting to these alone, have been frightfully devastated. The appaling fact is recorded, that officers having charge of these measures have refused to undertake them on account of the expense; and were finally roused to their duty, not by a sense of the awful criminality of their neglect, but by finding that the cost of coffins already distributed to the poor had exceeded the amount necessary for the thorough purification of their town. It is to be hoped that Mammon's betrayal of his votaries has in no other instance been attended by such disastrous results. Yet it is notorious that in almost every town visited by the pestilence the last summer, sanitary measures were delayed too long; so long as to annul half their advantages, and it is necessary to add that in most instances, this delay was dictated by a false economy, in the delusive hope that no extraordinary outlay would be needed.

In concluding my remarks on this topic, I cannot but express the fear that I have failed to present these statements in a manner to secure for them the grave consideration which they merit. It is not easy to give the interest of novelty to principles and facts so long, and so universally known. Yet trusting in their acknowledged truth and paramount importance, I leave them to plead their own cause.

Respectfully, your ob't serv't,

ALONZO CLARK.

State of New-York.

No. 93.

IN SENATE, MARCH 25, 1850.

LETTER

From Alexandre Vattemare.

Albany, March 25th, 1850.

To the Honorable George W. Patterson,
Lieut.-Governor, and President of the Senate.

Sir,—About the month of January last, the packet ship Oneida, from New-York to Havre, having on board eleven cases, containing about 1,500 volumes of rare and most precious historical and legislative documents, the liberal contribution of States, cities, and private individuals, all destined either for international exchanges or as free gifts to the American Library of the city of Paris, was wrecked on the coast of Guernsey. Among these tokens of fraternal good will, there were, independent of a gift from the citizens of Albany to the city of Paris, five copies of series of Documents, Journals, &c., of the Legislature of New-York, for the years 1846–7, 1847–8.

It was only on Friday last that I received, from the sub-agent of our central agency, Paris, this most distressing intelligence—a loss which I would consider an irreparable one, were I not to know, by long and happy experience, the unbounded liberality of this Legislature and of the American people.

I am therefore certain that the Senate will answer, with one voice, to my humble and respectful appeal to repair, *if possible*, a loss which would be greatly felt in the library of the National Assembly of France, and by the other legislative libraries of other European States, to whom I presented the documents of the former legislative years.

I have the honor to be,
Sir,
Your very humble and obedient servant,
ALEXANDRE VATTEMARE.

State of New-York.

No. 94.

IN SENATE, MAR. 26, 1850.

REPORT

Of the Canal Board in answer to resolution relative to the improvement of Seneca river at Baldwinsville.

IN SENATE,
March 9, 1850.

" *Resolved*, That the engrossed bill from the Assembly entitled "an act to improve the navigation of the Seneca river at Baldwinsville in the county of Onondaga," be referred to the Canal Board, and that said board be requested to ascertain and report to the Senate the probable expense of all the improvements and works contemplated to be made by said act, with an estimate of all damages which the State will in any way be liable to pay for land to be taken or flooded by the making of said improvement. And that said board also inquire and report what revenue the works and improvements aforesaid will probably yield to the State; and that they also state whether in their opinion it is expedient, and in view of the public benefits to be derived from such improvements and work for the State to make the same, with their reasons for such opinion, and also from what fund the expense must according to the provisions of the constitution be paid, and that the said board be requested to direct the State Engineer to examine the said premises and report thereon.

By order,
WILLIAM H. BOGART,
Clerk."

CANAL DEPARTMENT,
Albany, March 26, 1850.

In compliance with the resolution of the Senate, passed March 9th, relating to the navigation of the Seneca river at Baldwinsville, the Canal Board

RESPECTFULLY REPORT:

That the State Engineer and Surveyer proceeded, in accordance with said resolution, to examine the locks and dam at Baldwinsville, and to obtain authentic information concerning their value and utility. The report of that officer is herewith submitted to the Senate. Although the members of the Canal Board are not united in opinion as to the advantages to result from purchasing these structures, or the propriety of adopting them as a State work, they concnr in saying that the statements and estimates of the Stale Engineer and Surveyor will doubtless enable the Senate to arrive at safe and correct conclusions. As the responsibility of a decision belongs to the Legislature, the board conceive that they will have discharged their duty by communicating all the facts in their possession, bearing upon the subject, without enlarging upon the probable benefits or disadvantages of the proposed measure.

If the Legislature shall conclude to authorize the purchase and maintenance of this work, the Canal Board would respectfully suggest the expediency of adopting suitable provisions to ensure a discharge of all claims for damages on the part of mill owners and others concerned in or affected by the dam; and a release of the title of the proprietors of the locks and dam, including all their claims, at a cost not to exceed such definite sum as the Legislature may deem advisable to appropriate for that purpose.

A portion of the board concur in the principles of a new bill, which is herewith submitted to the Senate for their consideration.

WASHINGTON HUNT,
Comptroller.
ALVAH HUNT,
Treasurer.
H. C. SEYMOUR,
State Eng'r and Surveyor.
CHARLES COOK,
JACOB HINDS,
Canal Com'rs.
CHRISTOPHER MORGAN,
Secretary of State.

STATE OF NEW-YORK.
CANAL DEPARTMENT,
Albany, March 11th, 1850.

At a meeting of the Canal Board, *Resolved*, That the State Engineer and Surveyor be, and he is hereby, directed to visit and examine the premises mentioned in the bill entitled "An act to improve the navigation of the Seneca river at Baldwinsville, in the county of Onondaga," referred to this board by resolution of the Senate on the 9th instant, and report to this board, in relation to the matters mentioned in the said resolution of the Senate, with all convenient despatch.

I certify the foregoing to be a correct extract from the minutes.

F. H. RUGGLES, *Auditor*.

OFFICE OF STATE ENGINEER AND SURVEYOR,
Albany, March 20th, 1850.

To the Hon. the CANAL BOARD:

On the 9th instant, the Senate passed the following resolution:

"*Resolved*, That the engrossed bill from the Assembly, entitled 'An act to improve the navigation of the Seneca river at Baldwinsville, in the county of Onondaga,' be referred to the Canal Board, and that said board be requested to ascertain and report to the Senate the probable expense of all the improvements and works contemplated to be made by said act, with an estimate of all damages which the State will in any way be liable to pay for land to be taken or flooded by the making of said improvement. And that said board also inquire and report what revenue the works and improvements aforesaid will probably yield to the State; and that they also state whether, in their opinion, it is expedient, and in view of the public benefits to be derived from such improvements and works, for the State to make the same, with their reasons for such opinion; and also from what fund the expense must, according to the provisions of the Constitution, be paid; and that the said board be requested to direct the State Engineer to examine the said premises, and report thereon."

The resolution of the Canal Board, passed on the 11th instant, is as follows:

"*Resolved*, That the State Engineer and Surveyor be, and he is hereby, directed to visit and examine the premises mentioned in the bill entitled 'An act to improve the navigation of the Seneca river at Baldwinsville, in the county of Onondaga,' referred to this board by resolution of the Senate on the 9th instant, and report to this board, in relation to the matters mentioned in the said resolution of the Senate, with all convenient despatch."

As directed by the above resolution, I have *visited* and *examined* the premises in question, and beg leave to report to the board in relation to the matters mentioned in the resolution of the Senate.

I made my examination of the canal and dam at Baldwinsville, also the pond above, up to Jack's riffs, in company with engineers Clark and Richmond. Mr. Clark, resident engineer, assisted by Mr. Richmond, has, under my directions, made such surveys and estimates of cost and value as were deemed necessary in order to get at, with as much accuracy as possible, the probable cost to the State of the proposed assumption of the dam and canal at Baldwinsville. The estimates, made by the engineers named, are submitted herewith, and are entitled to the full confidence of the board.

I also transmit the releases of parties whose lands are flooded by the pond. These releases, as I understand from Mr. Parker, embrace all the land affected by the water, except in case of two proprietors, who will, I am assured, give the same release when they can be seen.

A statement of the business done on the canal for three years last past, also affidavits of business done by different mill owners, with the opinion of citizens of Baldwinsville as to the business to be done should the work be managed by the State is also appended.

"The probable expense of all the improvements and works contemplated to be made by said act," set forth in the estimate of Mr. Clark, resident engineer, are as follows:

Amount to be paid owners for present value of canal and dam, including the land occupied by canal,	$9,984 00

Add to this the cost of widening tow-path and new bridges for same, not properly chargeable as in estimate of engineer,...	900 00	$10,884 00
Repairing dam and locks, deepening canal two feet, and placing the whole in good order for navigation by boats of the size used in Oswego canal,............		5,765 00
Expenditure required for improvements,............		$16,649 00

The expenditure of a farther sum of $2,500 is required by the estimate of the engineer to deepen the channel of the river below the improvement in question. This work of deepening the channel has been carried on from year to year by the Canal Commissioners. The Seneca river towing path, extending from mud lock on the Oswego canal to lock at the foot of the Baldwinsville canal is a State work, and the cost of deepening the channel has been and is still a proper charge upon that improvement. To wholly remove the bars and to protect the channel from again filling up will require the expenditure above named of $2,500, and it is proper to state the fact that at this time without this expenditure, the deepening of the Baldwinsville canal would not be advisable. In case the canal is not deepened, but only such repairs made as are required to maintain the present capacity of the canal, then the cost of the repairs will only be $3,550, or with this expenditure the canal can be used at all times except at low water for the passage of boats of the required size to and from the mills and the pond above the dam.

The Senate resolution next requires " an estimate of all damages which the State may in any way be liable to pay for land to be taken or flooded by the making of said improvement." I examined both sides of the pond, which is say 12 miles in length, and found that for most of the distance the banks are steep, and that considering the length of shore, but little land is flooded by reason of the dam; assurances were given me that the land holders would release to the State without charge, provided the State would assume the work. I advised obtaining evidence of this by actual releases, which parties interested set about obtaining at once. I am of the opinion that there will be no damage to pay for land to be flooded by the dam. I think the maintenance of the dam will not prevent the draining of Cayuga marshes as proposed.

I directed a level to be taken at Jack's riffs and found the fall from the head the artificial channel to the foot of the same to be, 4 $\frac{49}{100}$ feet, and at a distance of 2200 feet below, a farther fall of $\frac{57}{100}$ feet more, in all, a little over five feet. This level was taken at high water, and the difference of level was consequently less than at low water. So far then as this pond is concerned, the Cayuga marshes can be drained, or the water over them lowered two or more feet.

The amount of revenue "the works and improvements will probably yield to the State," will depend upon the rate of tolls to be charged by the State; the law before the board, requires that such tolls shall be charged as will produce a revenue of 5 per cent on the cost of the improvement over and above the cost of maintenance. It is, I suppose very doubtful whether the State will for any great length of time insist upon the rates of toll being established with any such view to a fixed revenue from the work. It may be anticipated that the persons who are to pay tolls on this improvement will, after its assumption by the State, urge that its contributions to the revenues of the Erie and other canals, should be taken into the account when determining the tolls which they ought to pay, in order to reimburse the State. They may also urge that if only such tolls are charged on this improvement as on other portions of the State works, it will be as profitable (or more so) in proportion to its cost as many other tributaries to the revenues of the Erie canal. The idea, however, of charging greater rates on shorter distances than on longer ones, is, I apprehend, a just one, especially in a case like this, in which the expenditure is made (if at all) with a view, principally to shorten or prevent land carriage on commodities destined to the State works.

The maintenance of this improvement will doubtless have the effect to *increase* the revenues of the present State works over and above what they would be if the canal and pond should be closed against the passage of boats. The pond opens a navigation of about 12 miles through a productive country, and which will, for a long time to come furnish considerable quantities of wood for the salt works; for this reason a large population feel a lively interest in this matter, and are very properly anxious that the State should assume the work on the terms proposed by the law. That the revenue required by the law can be obtained under much less rates of toll than have heretofore been charged, is evident from the statements herewith of the past business of the place. Last year 186 boats entered the canal, each boat paying an average of over ten dollars as I am assured by gentlemen who pay a large portion of the revenue of the canal; these gentlemen also *certify* that not more than " *one half* the number of boats which during the three last years have loaded and unloaded at Baldwinsville, have passed through the canal" for the reason that the canal is out of repair and the tolls are unreasonably high.

The statement of the executor shows, that during the year 1847, 1848 and 1849, 805 boats have passed the canal; this is an average of 268 boats. Double this is 536 boats per year, which would have passed, provided the canal had been in good order and the tolls reasonable.

These gentlemen state, that the business of the canal will be doubled during the next two years if placed under State management. Supposing the number of boats passing through the canal should, however, be only 600, then a rate of charge less than one-third that heretofore charged would produce ample revenue.

Make the cost of the canal and damages $20,000, which is very considerably above the estimate, and the interest would, at five per cent., be,	1,000 00
Cost of repairs of canal and dam, ...	200 00
Lock tender, who can also examine boats and cargo, to prevent frauds upon the revenue,.....	360 00
	1,560 00

which, on 600 boats or 1,200 loads, is $2.60 per boat or $1.30 per lockage.

The board are also required to state, " whether, in their opinion, it is expedient, and in view of the public benefits to be derived from such improvements and works, for the State to make the same, and their reasons for such opinion." I would be better pleased if the resolution of the board did not require me to express an opinion on this last inquiry. It is a matter about which considerable difference of opinion exists among those well acquainted with the whole bearing of this question upon State policy and interests.

That the dam and navigation should be maintained, I have no doubt. I find no interest of any magnitude which requires the taking down of the dam, but, on the contrary, very large interests which would be destroyed by the destruction of the navigation and water power incident to it. If, however, the water power were the only matter of value involved, then the State should have no further alliance with it than to legalize its existence in the possession of its present proprietors. But the navigation is of value. Its influence upon the value of lands in that section is very great, and its influence upon the revenues of existing State works is of importance.

The State at an expense of $14,864 built in 1839, a towing path along the Seneca river for a distance of over 5 miles, connecting this improvement with the Oswego canal. By maintaining the Baldwinsville canal and dam, there will be about 12 miles added to the distance upon which tolls can be and are required by the proposed law to be charged, and in any farther extension of this improvement, if ever made, the State can equally guard its revenues.

The improvement has an importance which, taking into account its estimated cost and revenues, will fully justify its assumption by the State; more valuable interests will be promoted by its assumption than have been in case of many other State works, reference being had to the cost and income.

I can devise no plan for the maintenance of this work which will render it as useful and advantageous as the plan proposed by the bill. If none can be devised, I think the State should assume the works.

The bill proposes to pay the cost of the work out of the General Fund. This is, no doubt, the only source from which the cost should be paid if the bill should become a law.

Very respectfully,

H. C. SEYMOUR,

State Engineer and Surveyor.

H. C. SEYMOUR, ESQ.,

State Engineer and Surveyor:

Sir—I submit below the result of measurements and examinations made under your directions, in relation to improving the navigation of the Seneca river at Baldwinsville, in the county of Onondaga.

1st. An estimate embracing all the improvements and works deemed necessary for a good navigation.

2d. An estimate embracing simply what is necessary to maintain the present capacity of the canal.

3d. An estimate of the probable cost of the canal and dam, and the present value.

Estimated expense for a good navigation, affording not less than four feet depth of water at all times.

2,500 cubic yards of excavation, deepening channel in first 15 chains below lift lock, c 404,	$1,000 00
1,000 lineal feet of crib work, to serve as a coffer dam, and to remain to prevent future deposites, at $1,50 per foot,	1,500 00
6,000 c. yards of excavation in 37½ chs. lowering bottom of canal between locks, c 144,	840 00
Repairing south side of lift lock,	150 00
Building new guard lock, including sluice fixtures by the side of the same, to feed the canal, (foundation to be placed 2 feet below the present one,)	3,000 00
1 towing path bridge over the canal,	250 00
2 do mill races,	500 00
Lengthening culvert,	25 00
Repairing dam,	1,000 00
	$8,265 00

Estimated expense to maintain the present capacity of the canal.

Rebuilding guard lock on present foundation,	$1,500 00
Repairing south side of lift lock,	150 00
Widening towing path,	150 00
1 towing path bridge over canal,	250 00
2 do mill races,	500 00
Repairing dam,	1,000 00
	$3,550 00

Probable cost of canal and dam and present value.

1 lift lock of wood,		$3,876 00
1 guard lock of wood,		1,800 00
1 street bridge,		500 00
2 bridges,		242 00
1 culvert,		600 00
37½ chs. of canal between locks,		2,316 00
Dam,		3,500 00
7 acres of land, at $100 per acre,		700 00
Estimated cost,		$13,534 00
Deduct guard lock which is useless, (except foundation,)	$1,500	
Deduct repairs to dam,	1,000	
do repairs to lift lock,	150	
do widening towing path,	150	
do 1 towing-path bridge,	250	
do 2 bridges over mill races,	500	
		3,550 00
Present value,		$9,984 00

It will be seen that the estimate of $8,265 embraces 15 chains of work in the river, below the lift lock and coffer dam at the same place; also, the expense of sinking the bottom of the canal and guard lock two feet below the present bottom—improvements which I deem absolutely necessary to afford a good navigation.

My estimate of the cost and present value of canal and dam is predicated on the best data attainable, and may vary somewhat from the actual cost.

It is impracticable for me to ascertain, in so short a period of time, "the damages which the State will in any way be liable to pay for land to be taken or flooded by the making of said improvements." But from the releases and statements presented, it would seem that the damage to property flooded will be little or nothing.

It is obvious there will be no damage to property flooded in consequence of any improvements contemplated. All damage of this nature must have been occasioned from the original construction of the dam.

I can give you no other basis for revenue than the statements and affidavits of the principal business men at Baldwinsville, which I transmit herewith, together with the releases from persons owning property on the Seneca river.

On the 14th inst., a level was taken at Jack's riffs, and the fall from the head of the ditch or artificial channel to the foot of the same was found to be, ... 4.49 feet.
And to a point 2,200 feet below the foot of the ditch, a further fall of, ... .57

5.06 feet.

Respectfully yours,
JOHN T. CLARK,
Resident Engineer.

Syracuse, March 16th, 1850.

Statement of the property passed through the canal and lock at Baldwinsville during the years 1847, 1848 *and* 1849.

	1847.	1848.	1849.
Number of boats,	271	348	186
M. feet of lumber,	151	351	588
Tons of grain,	1,958	3,850	2,345
Tons of flour,	2,070	1,933	1,066
Cords of wood,	3,540	4,620	1,595
Tons of mase,	133	128	127
Cribs of timber,	91	55	91
Tons of plaster,	69	113	520
Tons of sundries,	1,460	248	405

I certify that I am one of the executors and trustees of the estate of Stephen W. Baldwin, deceased, and have charge of the books of the estate; that the above is a correct and full abstract from my canal register of the boats, lumber and other articles which have paid tolls through the canal and lock at Baldwinsville during the three years last preceding; that the quantities of lumber, grain, and other articles, upon which tolls have been taken, as stated in the above abstract, have in no case been ascertained by actual weight or measurement, but have in almost all cases been estimated by the person or persons desiring a lockage, without being inspected by me or any other person in behalf of the Baldwin estate.

Dated March 15, 1850.

GEO. W. ROBINSON.

We, the undersigned, inhabitants of Baldwinsville, do certify that we have examined the statement of George W. Robinson, Esq., hereto annexed, and are well acquainted with the manner in which tolls have been assessed and imposed upon articles passing through the canal at this place; that in our opinion and belief, the articles which have passed through the lock during the three last years far exceed the amounts which have paid tolls; that the executors having charge of the canal do not pretend to exact the rates of toll established by law, and in making the reduction, have habitually allowed the quantity to be underestimated; and we have no doubt that in the average, the actual amounts have exceeded those stated by Mr. Robinson at least one fourth.

And we further certify that large amounts of grain, flour, wood and timber are shipped from this village without passing through the lock, and this has been the case more especially the preceding season; that large amounts of wheat and merchandize have been unloaded below the lock and carted up to the village; that the reason so much business is done independently of the canal, is that the tolls are unreasonably high, and the canal has been so much out of repair as to render the navigation difficult and uncertain.

And we further certify that, in our opinion and belief not to exceed one-half of the number of boats which during the three last years have loaded and unloaded at Baldwinsville, have passed through the lock.

And we further certify that the village of Baldwinsville is surrounded by a rich and fertile country, which is constantly improving in its capacity for agricultural productions; that the machinery at this place for mechanical and manufacturing purposes is rapidly increasing; that we verily believe under State superintendence, and at the rates of toll proposed to be imposed by the State, the tonnage received and sent from this place by water will be at least doubled in two years, and that the present capacities of this place warrant such an opinion, independently of the probable increase above stated. March 15, 1850

Allen & Case, merchants,
John Fryer, merchant,
P. H. Sharp, grocer and manufacturer,
Gable & Ackerman, lumbermen,
S. C. Parker, miller,
Glass & Williams, merchants,
Frazee & Preslow, millers,
H. G. Beach, lumberman,
W. H. Downer, merchant,
Otis Bigelow, merchant,
Lewis R. Bush, lumberman,
Richard Savage, lumberman,

Onondaga County, ss. Sanford C. Parker, of Baldwinsville, being duly sworn, saith, that during the last season of canal navigation he received by the canal over twenty thousand bushels of wheat, which were unloaded below the lock, and carted up to the village to his mill, and that he shipped about five thousand barrels of flour from the same place below the lock. And deponent further saith, that during the season of 1848 he received and shipped about the same amounts as above stated, from below the lock. Dated March 15, 1850.

S. C PARKER.

Sworn before me this 15th
day of March, 1850.

GEO. A. STANSBURY, *Justice of the Peace.*

Onondaga County. Irvin Williams of Baldwinsville, being duly sworn, saith, that in the year 1848, the firm of Glass & Williams, of which he is a member, shipped from below the lock, at Baldwinsville, eight thousand bushels of oats which were carted from their store-house to that place, a distance of half a mile; and that in the year 1849, fifteen hundred barrels of flour, and over twenty five hundred bushels of barley were shipped by them at the same landing, and carted as above mentioned; and that in the year 1849, they also received at the same landing and carted to their mill over thirteen thousand bushels of wheat. March 15, 1850.

IRVIN WILLIAMS.

Sworn and subscribed this 15th day
of March, 1850, before me,

GEO. A. STANSBURY, *Justice of the Peace.*

Onondaga county, ss: Henry G. Beach of Baldwinsville being duly sworn, saith that in each of the years, 1848 and 1849, he shipped from below the lock at Baldwinsville, over half a million feet of lumber. March 15, 1810.

H. G. BEACH.

Sworn before me, this 15th
day of March, 1850.
GEO. A. STANSBURY, *Justice of the Peace.*

Onondaga county, ss: Willard H. Downer being duly sworn, saith that in the year 1848, the firm of W. H. Downer & Co. shipped from below the lock at Baldwinsville over eight thousand bushels of oats which were carted from their store house a distance of over half a mile. March 15, 1850.

WILLARD H. DOWNER.

Sworn and subscribed this 15th of
March, 1850, before me.
GEO. A. STANSBURY, *Justice of the Peace.*

Onondaga County ss. Lewis R. Bush of Lysander, being duly sworn, saith, that during the last season of navigation the firm of Savage & Bush, of which he was a member, shipped from Baldwinsville over one million feet of lumber, which did not pass through the canal at this place, nor pay tolls to the Baldwin's estate; and that during the previous season they shipped in like manner over six hundred thousand feet. Dated March 16, 1850.

LEWIS R. BUSH.

Swon and subscribed this 16th day
of March 1850, before me,
GEO. A. STANSBURY, *Justice of the Peace.*

Onondaga County, ss. Oliver P. Cook, of Baldwinsville, being duly sworn, saith, that the firm of Cook & Howard, of which he is a member, shipped last year over ninety thousand feet of lumber which did not pass through the canal at this place. March 16, 1850.

OLIVER P. COOK.

Sworn and subscribed this 16th day
of March, 1850, before me,
GEO. A. STANSBURY, *Jurtice of the Peace.*

To the Honorable the Senate of the State of New-York :

The undersigned, a minority of the Canal Board, beg leave in answer to the resolution of the Senate of the 9th of March, instant, making certain inquiries of this Board, relating to the dam, &c., at Baldwinsville, to report, that in compliance with the request of the Senate, the State Engineer and Surveyor visited the dam and river in question, made faithful examinations and estimates, and collected all the facts which can be useful to the Senate in forming a correct judgment as to the propriety of making this navigation a State work. These facts are clearly presented in the able report of that officer which accompanies the report of the majority of this board, and we cheerfully commend that report to the attention of the Senate.

We conceive that the Canal Board has fully discharged its legitimate duty when it has communicated to the Legislature such useful facts as may be in its possession ; and we do not feel justified in arrogating to ourselves the right of in any manner discharging or interfering with the appropriate duties of the legislative branch of this government. We therefore dissent from so much of the report of the majority as recommends any particular line of action to the Senate ; and we forbear expressing any opinion of the merits of either the Senate bill or the bill transmitted by a majority of the Canal Board.

Respectfully submitted.

L. S. CHATFIELD,
Attorney General.
FREDERICK FOLLETT,
Canal commissioner.

State of New-York.

No. 95

IN SENATE, MARCH 27, 1850.

REPORT

Of the Committee on Finance, on bills imposing tolls upon certain roads, and upon petitions asking for the abolishment of tolls upon the central line of railroads.

The standing committee on finance, to which was referred two Senate bills, being acts to impose tolls upon the New-York and Erie Railroad, and upon the Saratoga & Schenectady and Rensselaer & Saratoga Railroads, as also several petitions praying for the abolishment of tolls upon the central line of railroads, have had the same under consideration, and ask leave to submit the following

REPORT.

The State having many years since loaned its credit and expended its money to the extent of many millions of dollars in constructing the Erie and other canals. Thereby adding largely to the comfort, convenience, wealth and prosperity of the central portion of the State, and the southern tier of counties having borne freely its share in contributing to produce this result. A charter was granted in 1832 for the construction of the Erie Railroad, and for the benefit especially of the southern tier of counties, as being eminently due to that portion of the State.

Subsequently to the granting of the charter, and owing to the magnitude of the undertaking, a sufficient private subscription could not be obtained, and after several years of toil and delay, the State granted its credit to the extent of three millions of dollars to aid in its construction, and yet when this large sum had been expended, together with about one and a half millions of private subscription, only a small part of this great work had been completed, when the company utterly failed and became insolvent, leaving the amount expended, both by the State and private subscription, of but little value. Soon after this, a new board of directors were elected, and which evinced a determination to make a vigorous effort to overcome the embarrassments and the difficulties which had hitherto obstructed the progress of the work, and if possible, carry it forward to Lake Erie, as originally designed.

Believing, undoubtedly, that the recovery of the large amount loaned by the State, was in the then disastrous condition of the affairs of the company, at least uncertain, and as an inducement for obtaining new subscriptions, the Legislature on the 14th May, 1845, granted an entire release to the company, from the three millions of dollars due to the State, conditioned that a sufficient amount of money to complete the work by a given time, should be raised by private subscription. The charter was granted free from any stipulation or reservation, authorising the imposition of canal tolls, and not improbably the subscriptions were obtained partly on the representations that the charter was free from that liability. The road has progressed with as much speed as could have been reasonably expected; and though much yet remains to be done, it is hoped. that without some unexpected embarrassment, the day is not distant when its entire line to Lake Erie will be open.

Regarding it as a great public work, largely benefiting the counties and regions of country through which it passes, owned almost entirely by the people of this State, and with no immediate prospect of returning for some years the interest on the amount invested therein, its stock only marketable at about two-thirds the par value, it would seem almost a misfortune, even if the settled policy of the State was such, that any new burthen should be imposed upon this enterprise while in its present unfinished state, and when struggling against numerous difficulties to its termination at Dunkirk.

But is it in reality the settled policy of the State to impose tolls upon all railroads? certainly not. Is it the policy to impose such tolls upon all freight transported upon roads running parallel with any of its canals, or where such railroads are supposed to divert the freight from the canals? The answer to that question is, that such seems to have been the policy of the State for a few years, past viz: to impose tolls upon all freights transported upon railroads running parallel with, or so as to divert it from the canals.

Admitting then, as your committee do, that for a time this has been the prevailing policy of the State, the question is presented whether it is to be continued? and if so, how is the discrimination to be made, and which portion shall, and which shall not be taxed upon a road like the Erie, a portion of whose freight is not diverted from or would otherwise have been transported upon the canals of this State. It would hardly be expected that *such portion* could be subjected to the payment of canal tolls. But it is said that a large amount of freight is being diverted from the canal revenue, that would otherwise have been transported either through the canal or over the central line of railroad to and from points and places at and about Geneva. And statements have been exhibited showing the results of the month of January, and 24 days in February, by which freight amounting to two thousand and seventy-six tons was thus transported in that short period. Most or all of which it is claimed has been diverted from the central line of railroads, which by law are compelled to pay to the State the same tolls on all freight passing over said roads, as would have been received if the same had been transported upon any of the canals of this State. Now if this is a correct state of the case, it seems to indicate that some change of State policy must be made by the Legislature to remedy the injustice complained of, either by abolishing the tolls on the freight transported over the central line or to impose, tolls in some equitable form upon the freight transported over the Erie railroad. It surely is not the the intention of the Legislature to continue so manifestly an unequal system of taxation as this would appear to be.

To abolish the tolls on property transported upon the central railroad would be to deprive the canal completion Fund of a considerable amount of money, and postpone still farther that important work which it is desirable should be completed at the earliest practicable period, in order to a full realization of the greatly augmented receipts of the State Treasury, which are likely to be produced when the entire enlargement of the Erie canal shall have been completed; and to defeat this enlargement, or to delay it, unless there is a stern necessity for so doing, would be to disappoint the numerous friends of that vast State work, and greatly mistaken policy in a financial point of view, as few, if any, entertain any other opinion than that the revenues of this State are to be largely increased by the facilities such completion will afford.

It cannot be denied that it is an embarrassing and, to some extent, a complicated question, so to adjust and define by law a system that shall equalize the burthens and the benefits to the greatest possible extent among all the people of this State, without distinction as to class, condition, or location, so that each shall bear its share of one, and receive its fair proportion of the other with equal and exact justice. That the time is drawing near when a revision of the policy of the State, by which tolls are imposed upon certain railroads, will become necessary there can be no doubt. It is a subject involving very large interests and important principles, requiring sound and discriminating judgment and mature consideration, in order that no interest should be overlooked, and that even handed justice should be meted out to all. Such consideration and such revision can hardly be given during the present session of the Legislature. Its near termination, and the large amount of unfinished business now before it; the numerous private claims which, under the present system, are every year adjudicated before the Legislature, many of which have been too long delayed, becoming daily more pressing and urgent, as also a considerable amount of business in the hands of each senator, for the progress of which he feels responsible, all combine to render it impracticable that a proper consideration can be given to a subject of such vast importance to the people of this State during the remainder of the present session. Your committee believe it would be just for the Legislature to abolish the tolls upon live stock and fresh meats on all existing railroads. Beyond this, they do not consider it advisable to attempt any change of the existing laws, during the present session; at the same time believing that it will become the duty of the Legislature, at no very distant period, to revise the present system of canal tolls in such a manner as to make it as nearly as possible equal in its application to all the interests of this State, your committee propose for adoption the following resolutions, and ask leave to introduce a bill.

Resolved, That it is inexpedient, at this time, to impose canal tolls upon the New-York and Erie Railroad Company.

Resolved, That it is inexpedient, at this time, to impose canal tolls upon the Saratoga and Schenectady, and Rensselaer and Saratoga Railroad Companies.

Resolved, That it is inexpedient, at this time, to abolish all tolls upon freight transported upon the central and other existing railroad companies.

Resolved, That it is expedient to abolish canal tolls upon live stock and fresh meat transported upon any railroad in this State.

Respectfully submitted,
EDWIN D. MORGAN,
CHAS. COLT,
WM. HORACE BROWN,

State of New-York.

No. 96.

IN SENATE, MAR. 28, 1850.

REPORT

Of a majority of the Judiciary Committee on the bill to settle the controversies existing between the State of New-York and certain occupants and claimants of land and to confirm the title to said lands.

The undersigned, a majority of the standing committee on the Judiciary to which was referred the bill to settle the controversies existing between the State of New-York and certain occupants and claimants of land, and to confirm the title to said lands, respectfully submit to the Senate the following

REPORT:

That regarding the objects proposed to be accomplished by the bill referred to them, of the greatest importance, and intimately connected with the social and political relations of large classes of our citizens, and greatly affecting the general welfare, they have given to the subject as careful and deliberate a consideration, as their necessary attention to other subjects of legislation would permit,

The general object and design of the bill, is to provide a just and equitable mode of settlement, of the unhappy and disastrous controversies, which have existed for the last eleven years between certain landlords or owners of rents, reserved on leases of various tracts of lands in several of the counties of this State, and the occupants of such lands; and to which controversies the State has made itself a party, by the commencement of suits to recover in its own right and for its own use, portions of those lands

No subject of greater importance, so far as the general welfare, the peace and good order of society, the observance and execution of the laws, and the right of the citizens of this State to the enjoyment of their property is concerned, has been, in the judgment of your committee, brought before the Legislature for its action.

The committee feel warranted and justified in saying, that the bill which was introduced by one of their number, has been brought forward not to promote the interests or gratify the wishes of any particular class, but with the sole view and design of promoting the interests and welfare of all. It is not a measure brought forward at the instance or request, or with the approbation of either landlords or tenants, and how far it will meet the approval of either of those classes, your committee have no means of knowing. But they trust that the measure, if found on careful examination and scrutiny, to be based on sound principles of justice, will meet the cordial approval of the legislature, and of all men who desire to promote the true and best interests of their fellow citizens. A brief statement of the origin and progress of the disputes and controversies referred to, will clearly show how great are the moral, social and political evils, which the bill under consideration proposes to aid in eradicating. It is well known, that in the early settlement of the colony of New-York, large tracts of land were granted by the government to individual proprietors. At the time of the making of these grants, the country was sparsely peopled, large portions of what now constitute the most fertile and productive regions of the State, being then covered with their native forest, and occupied by savage and hostile tribes of Indians. The new and wild lands of the colony were then regarded as of little value; emigrants were wanted to occupy and settle them for the purpose of increasing the population of the colony, and adding to its strength and means of defence against hostile attacks from neighbors or enemies.

One great object of making to individuals the large grants of land which have been referred to, was to promote the progress and settlement of the country, by making it the interest of individual proprietors, to use efforts and expend their means to induce emigrants from Europe to remove to the colony, and settle upon and improve their lands. Many of the early emigrants who sought a home for themselves and their posterity in the far off wilds of America, were destitute of means to defray the expenses of removing their families to the new world, as well as of the means to purchase or even to improve the lands on which they settled.

They were dependant on the fruits of their daily labor for the support of themselves and their families. They then gladly accepted grants or leases of land in perpetuity, reserving a small annual rent, instead of contracting to purchase what they had no means to pay for.

These grants or leases were in very many cases made free of rent for the first six or seven years, so as to give the new settler an opportunity to clear portions of the land and place himself in a condition to pay before he should be called on to make any return for the land he occupied.

This is a brief statement of the origin of the lease hold tenures which still exist on several large tracts of land in some of the counties of the State. The leases granted by the proprietors were in general in perpetuity, reserving a small annual rent, payable in wheat or money, labor or services, or articles other than wheat, and some of them contain reservations to the lessors of mines and water powers, and what are called quarter sale covenants or reservations, or fines on alienation, by which the tenant was obligated when he sold his interest in the land leased, either to give the pre-emption right to his landlord, or to pay him a certain portion of the purchase money obtained for his interest in the land and the improvements he had made upon it.

It was in this manner that the large tracts of land in question were first settled. At the time the leases were given the terms were mutually satisfactory to the contracting parties. The landlord was desirous of improving and settling his land which he had purchased from the government, and those who took leases were satisfied with that mode of acquiring a right to the occupancy and enjoyment of the lands which they designed for the future homes of themselves and their children. The emigrant or new settler was then, in general, poor and defenceless. He sought and needed the aid and protection of his patron or landlord; and the contracts into which they originally entered, were at the time regarded by both as mutually beneficial. But the circumstances and condition of the country, as well as its government, have greatly changed since the first emigrant came to settle in the far off colony of the New-Netherlands. From a small, feeble, and defenceless colony, we have grown to be a large, prosperous and powerful State.

Our population, instead of occupying a few "manors" on the borders of the Hudson and Mohawk, has spread over more than forty thousand square miles of territory. Our people have freed themselves from their dependence on the mother country and established a free, democratic and constitutional form of government The actual cultivators of the soil have become the most numerous, influential and independent class in the State. They justly and properly desire to be their own landlords, and to own the lands which they occupy and cultivate, free from all rents, reservations and conditions whatsoever. The leases reserving rents, payable in money, wheat or services for ever, and under which the manorial lands, as they are called, were first settled by a preceding generation, have become odious to the present occupants. They allege that the tenures under which they hold, are opposed to the very spirit and genius of our government; that they tend to retard the improvement and development of the resources of the country, and are adverse to the progress, independence and social welfare of the people; and that however beneficial or satisfactory these tenures may have originally been, that they are now the cause of grievous evils to them, as well as to the whole community.

The lands in question have been held and occupied under these tenures from their first settlement to 1839, a period ranging from fifty to more than one hundred and fifty years, without any open or public expression of dissatisfaction, except in one or two instances, on the part of the occupants.

In January, 1839, the late Stephen Van Rensselaer, of the city of Albany, who was one of the largest of these proprietors, died. He had been proverbially, a kind, forbearing and generous landlord, the patron, friend and protector of those who were the occupants under leases in fee of the lands which had been granted to his ancestors, and which in the ordinary course of human events, had legally descended to him. At the time of his death, and through his perhaps too generous forbearance, large arrearages of rent were due to him, which by his will he bequeathed to trustees for the payment of his debts.

The attempt made by his trustees in pursuance of the directions of his will, to collect the rents in arrear, was the immediate occasion of the first anti-rent outbreak in the county of Albany. The progress and dire consequences of that movement are a part of the history of the State.

The occupants of these lands in many cases, not well able to discharge the large arrearages of rent due from them, and suffering under the evils which resulted from this kind of tenure, resisted the payment of their rents; and to make this resistance more effectual, they organized themselves into associations to assist and protect each other, and under assumed disguises the better to escape detection, and the consequences of their own acts, they forcibly resisted the execution of the laws, and set its officers at defiance.

The flame which was first lighted in Albany county, spread to other counties where the same kind of tenures prevailed, and similar associations were there formed to resist the payment of rents and the execution of the laws for their collection. The consequences resulting from this state of things have been of the most deplorable and disastrous character.

The execution of the laws has been resisted, its officers set at defiance, and shot down in open day while in the execution of their duty, by bands of armed men; the power of the county and the military power of the State have been resorted to to aid the officers of the law in the execution of their duty, and in several instances one or more counties have been proclaimed by the executive authority of the government to be in a state of insurrection. The counties in which these disturbances occurred, have been subjected to the payment of large expenses incurred in efforts to maintain law and order, by which the burthen of taxes on the people in those counties has been increased. The Treasury of the State has had frequent drafts made upon it, to pay large expenses incurred under the direction of executive authority in maintaining peace and enforcing the execution of the laws. In addition to these evils of a public character, injuries still more serious have been inflicted on individuals. The peace of families and neighborhoods has been in many instances destroyed. Relatives and friends have been alienated. Sales of farms have been prevented, improvements retarded, and the value of the property of both tenants and landlords depreciated. The social and domestic relations of life have been disturbed, and the general welfare of the whole population in the disturbed districts injuriously affected. Crimes of the deepest dye have been committed. The violators of the laws have been tried, convicted, sentenced, and pardoned. No good citizen can look back on the past history and consequences of the anti-rent movement without seeing and lamenting the social, moral and political evils that have resulted from it, or without being fully impressed with the great benefits and advantages which will result to the occupants of these lands and their families, as well as to the whole State, by an end being put to these unfortunate and lamentable controversies.

The tenures under which these lands are held, when they are productive of such consequences, must be regarded as injurious to the public welfare. To change them into unconditional estates in fee simple, has become an object of great importance to the public, as well as to the ocupants of the lands in question. These leasehold tenures are adverse to the free and independent spirit of our people, and any practicable constitutional plan of changing them and thereby putting an end to the evils resulting from them, should meet the hearty and cordial concurrence of every citizen who desires to do good to his neighbor, and to promote the welfare of the State.

Your committee do not, by anything they have said, intend to cast any aspersions upon the class of men known as anti-renters. That some of them have been guilty of great and unjustifiable violations of law, they will not themselves deny, but as a class they are still regarded as holding a respectable station in society. They habitually acknowledge, and endeavor to perform all their contracts and obligations, other than for the payment of the rents charged on their lands. They maintain schools and churches, pay to the government the taxes imposed on them, and endeavor to fulfil to each other, and to society, the duties which devolve on them as neighbors and citizens. But while they practically and daily do all these things, they repudiate their obligations or contracts to pay the rents reserved in the leases under which they hold their lands, and they inculcate on each other and on the generation that is growing up around them, and soon in the natural course of events to occupy their places, that such repudiation is justifiable in order to relieve themselves from the grievances which they suffer in consequence of the tenures under which their lands are held.

That the grievances resulting from this kind of tenures have become great, your committee concede, and that the evil consequences to the tenants, arising from the controversies in which they are engaged with their landlords by reason of these tenures, are almost equally great your committee also believe. As long as these combined and concerted efforts to resist the payment of rent continue, they must injuriously affect the social condition and the pecuniary interests of those engaged in them. Indeed all candid and reflecting men among those thus engaged, admit that the evils resulting to them from the condition and circumstances in which they are now living are of a serious character, and most of them express a wish to have these evils terminated and the reign of peace, order and kindly feeling again restored among them.

But the evils resulting from the spirit of agitation and resistance to the payment of rents, reach beyond the immediate localities where this spirit prevails. They extend to the whole body politic. Successful and continued resistance to the due administration and execution of the laws, weakens the confidence of every man in the security of his rights of person and property guaranteed to him by the government. It impairs confidence in titles to real property, and deters men from making investments on its security.

As was natural, and perhaps under our form of government inevitable, the parties who have been seeking from the government relief from the grievances of which they complain, have availed themselves of the political power which they possess at the ballot boxes, to aid them in the accomplishment of their objects, and "*anti-rentism*" has consequently become an element in the politics of the State.

Men ambitious of station and political power, have courted its influence, and have at times, by availing themselves of accidental circumstances, and the peculiar condition of the two great parties into which the electors of the State have been divided, rendered it the means of accomplishing the objects of their ambition.

The executive, judicial and legislative departments of the government, have not been wholly beyond the reach of its influence. But notwithstanding eleven years of agitation, governors, judges, legislators and lawyers, have as yet been unable to afford the tenants any substantial relief. Large sums of money have, during all that time, been paid by the occupants of the lands in question, to defray the expenses of harassing and vexatious litigations in which they have been engaged, and which have thus far, as is believed by your committee, been of much larger profit of lawyers and politicians, than to tenants. At all events none of the measures of agitation and resistance have yet brought to the occupants of these lands any substantial relief.

The hope, the promise of relief, has indeed been held out to them, at almost every returning election by those who have sought their votes at the ballot box, but no such relief as they desire is yet obtained. The odious tenures yet continue, and the pecuniary and social condition of the great body of the occupants of the lands in question is worse than it was eleven years since, when the agitation commenced. Those who have hitherto promised to the tenants bread, have given them only a stone; various measures of relief have from time to time been suggested and advocated, by those who desire to avail themselves of the influence and power exercised at the ballot box by those who were honestly seeking some legal and constitutional mode of relief from the grievances resulting from their lease-hold tenures. But the truth is, and this they who have hitherto made these delusive promises well know, the Legislature have no power under the Constitution to give the tenants the relief they want. *The Constitution of the United States guarantees the inviolability of contracts*, and no law which the State Legislature can enact can, so long as the Constitution of the United States is the supreme law of the land, subvert or destroy the great principle on which all rights to property rest. Indeed the right of property in every civilized society does not rest on any guarantee of a written constitution. It is a right resulting from, and lying at the very foundation of the social compact, and no government, whether restrained by a written Constitution or not, has the right, by the exercise of its mere volition, to take one man's property and transfer it to another.

The rents reserved in the leases of the manorial lands are as sacredly the property of the lessors, and as inviolable in their hands, as are the estates and interests of the occupants in the same lands, or as is the estate or title of any other citizen in any lands owned by him, and it is as much the duty of the government to protect one citizen as another in the enjoyment of his property. Your committee are aware that it has been urged by some whose opinions are entitled to respect, that the government has the power, by the exercise of the right of *eminent domain*, to take from the landlords against their consent, but on making just compensation therefor, the estates and interests which they own in these lands, for the purpose of promoting the public welfare, by changing the tenures into absolute, unconditional estates in fee simple; or in other words, that the State may take from the landlords and against their consent, their property in the manorial lands for *the public* use, on making just compensation.

The right of the government, by the exercise of its sovereign power, to take or resume the individual property of the citizen when necessary for the public use, on making just compensation, cannot now be questioned; but the power thus to take individual property from the owner against his consent, with the view not of retaining it for any public use, but with the sole purpose of selling it out again to other citizens, for the purpose of introducing a different kind of tenure of real estate, better adapted in the judgment of the Legislature to promote the general welfare, may well be questioned. If such a construction of the right of eminent domain should be established, it necessarily makes the tenure of every man's property subject to the mere will of the Legislature. It would authorize the Legislature, whenever it should judge that the public interest would be promoted by changing the tenure or character of the property of the citizen, to take it from him on paying him in money the appraised value thereof. It would authorize the government to take from a large proprietor of land, his estate for the purpose of granting it out again in smaller parcels, or in more equal proportions, the better thereby to promote the general welfare.

No precedent for any such exercise of the right of eminent domain, which is the right to take private property *for public use*, has yet been found in the action of any government, to the knowledge of your committee.

Private property may be taken against the consent of the owner, on making just compensation, for *public use*; but the words *public* *use* are used in a more restricted sense than the words *public welfare.* It is not, in the opinion of the committee, in the power of the government, under the pretence of taking private property for public use, to take it, or authorize it to be taken, in all cases when it may judge that such taking will promote the *general welfare.* This is a latitudinarian construction of the right of eminent domain that has never yet been sanctioned by the decision of any court of justice, or the action of any legislative body.

The right to take private property for public use has heretofore been supposed to be limited to cases where the use of the property taken was in some way to be confined to, and continued in, the public. The most familiar cases of the exercise of this right, by governments, are those in which private property is taken for the purpose of fortifications or means of defence in war, or for the construction of roads, canals, and bridges, to promote and facilitate internal communication and commerce *for the public use*, or use of all who choose to avail themselves of the advantages thus offered; but in no instance has such right been exercised for the mere purpose of changing conditional estates, or estates for years or for life, into estates in fee, or for the purpose of substituting one kind of estates in lands for another which would, in the judgment of the Legislature, better promote the public welfare, and be more congenial to the spirit and genius of our people.

All grants of lands are supposed to be primarily derived from the government or sovereign power of the State; and the right of eminent domain is the right which exists in the government to resume the subject of the grant whenever it shall *be necessary for the public use*, on making compensation for the property so taken; but no jurist has hitherto supposed that the government possessed a right thus to resume the subject of the grant, for the purpose of again granting it to other persons, to be held under other tenures, and with no other view than thereby the better to promote the general welfare or prosperity of the country, or of some particular portion of it.

Your committee are informed that very many of the owners of the manorial lands, considering the inability of the Legislature to grant them relief, and the impossibility of extinguishing their leasehold tenures, except by purchase, and being willing and desirous of ending the unprofitable controversies and litigations in which they are now involved, are ready to purchase of the landlords and that the landlords are willing and desirous to sell, on terms that would be mutually satisfactory, but that the owners or tenants fear to purchase the rents reserved in their leases, for the reason that they believe that the alleged title of the landlords is fraudulent and void as against the State or has become forfeited or escheated to the State by the non fulfilment of conditions contained in the original grants ; or in other words that if they extinguish their leasehold tenures by purchase from the landlords, of the estates and interests they claim to have in the lands or rents reserved thereon, that the State will then come in, and by asserting a superior and paramount title, deprive them of all right to the enjoyment and possession of these lands. And they as a further excuse for their refusal thus to purchase and thereby relieve themselves from the evils entailed upon them by the leasehold tenures, allege that the State is now prosecuting suits to recover the lands in question, so as to establish its legal right to turn off both landlords and tenants, and to appropriate the lands to its own use ; and on this ground some of them have petitioned the legislature at its present session to pass a law, restraining the collection by the landlords of the rents reserved so long as the State is litigating for the recovery of their lands.

It appears from a report made on the 14th of January last, to the Senate, by the Attorney General, (Senate document No. 26,) that suits were commenced by the late Attorney General, (Mr. Jordan,) in the name and in behalf of the State, to recover portions of these lands, in the counties of Albany, Rensselaer, Columbia, and Montgomery, and that such suits are now being prosecuted by the State to recover in its own right, and for its own use, the lands in question.

It further appears that these suits were commenced by the late Attorney General, in pursuance of the following joint resolution of the two houses of the Legislature, passed on the 10th of April, 1848.

" *Resolved*, That the Attorney General be instructed carefully to enquire and ascertain, whether in any of the lands in this State, now claimed to be held under any of the manorial titles referred to in this report, the claim of the present landlord be open to just doubt and question, and whether in his judgment this State *may justly and legally* lay claim to the title of the same, or any part thereof, by escheat or otherwise ; and if in his opinion, the title of the present claimants may *be justly* questioned, and *the right of the State to such lands, or to any part of the same, be established according to law*, that he take such measures, either by suit at law, or any other proper proceedings, as will test the validity of such titles or claims."

Your committee do not find any written or documentary evidence, to shew whether the late Attorney General complied with the directions or intention of this resolution, before he commenced the suits, which have placed the State in the attitude of claiming to be now the just owner of these manorial lands, which have been held under color and claim of title adversely to the State, since their first settlement.

By the resolution, the Legislature instructed the Attorney General "carefully to inquire and ascertain, whether '*the claim of the present landlords be open to just doubt and question*,'" and "whether in his judgment, this State may *justly* and *legally* lay claim to the title of the same," and then instructed him to commence prosecutions in behalf of the State, only on the condition, that in his opinion the title of the present claimants might *be justly questioned*, and the right of the State to such lands, be established according to law. How carefully the late Attorney General investigated the titles claimed by the present landlords, or on what facts he founded his judgment as a lawyer, and as Attorney General, that the State *might justly and legally lay claim to the title* of these lands, the records left in his department do not show. The Legislature have had no means of reviewing, or of approving or dissenting from the opinion of the late Attorney General, on the question they submitted to his determination.

The Legislature, as well as the present Attorney General, are left to infer from the fact that he commenced suits, that the late Attorney General, (Mr. Jordan,) had, as the highest law officer of the State government, formed, after careful investigation, the opinion that the title claimed by the landlords in question *might be justly questioned, and the right of the State to such lands might be established according to law.*

The present Attorney General, in his report before mentioned, says: "as yet I have not had time or opportunity to examine the questions involved in the actions commenced by my predecessor, and now pending. Confidently relying, however, *on Mr. Jordan's ability as a lawyer and integrity as a man*, I must act on the assumption that the actions commenced by him are meritorious, and should be faithfully prosecuted to a speedy termination.''

It is thus seen that the State in its character of sovereign, is now seeking to recover to its own use, portions of these manorial lands, and to *divest the tenants and landlords* of the estates and interests which they claim to have in them, and which are derived under grants made by the crown prior to the revolution. On what precise ground it is alleged that the State *may "justly and legally"* lay claim to these lands, does not appear, and the State is now carrying on expensive litigations to recover large tracts of land in cases in which no officer or department of the government pretends to have any knowlege of the facts or grounds on which the right to recover rests. That knowledge is still confined to the breast of the late Attorney General, who has not left any record of his opinion, or the facts on which it was founded, that the State *could justly and legally* lay claim to these lands, and that its right to them could be established according to law. Your committee think that they shall not be departing from the subject matter referred to them, if under these circumstances they inquire into the propriety and justice of the State, thus setting up a claim to these lands, and prosecuting suits for their recovery. These suits necessarily concern the whole people, and if wrongfully or improperly prosecuted, injuriously affect the character and honor of the government.

It must of course be assumed, that the State is prosecuting to recover these lands for its own use, and that it is not lending its name and power to prosecute them for the benefit or use of a particular class. If it is thus lending its name and prosecuting these suits not with the intent in good faith to recover these lands on just and legal grounds for the use and benefit of the whole State, but for the use and benefit of a part of its citizens, or for the purpose of harrassing by expensive and vexatious litigations, those against whom they are being prosecuted, then it is the duty of the Legislature to direct the Attorney-General at once to discontinue them.

It is a part of the history of the country, that the lands in question are held under grants from the crown of Great Britain, made during the existence of the colonial government, and that the lands have been quietly and peaceably occupied under such grants by the present claimants and those under whom they have derived title, adversely to the rights of the State, since the lands were first settled, which is from fifty to more than one hundred and fifty years. The titles to more than half of the agricultural lands in the State are now held in fee by the present occupants, under similar grants. If those who originally obtained grants for these lands were guilty of fraud in obtaining the grants, or have failed in the literal fulfilment of the terms and conditions of the grants, the government of the colony, as well as the present government, has acquiesced in and recognized their claim of title, and suffered them peaceably to occupy the lands, without setting up any claim to them on the grounds now assumed, until Mr. Attorney-General Jordan commenced the suits in question, under the resolution of the 10th of April, 1848. Under this state of facts, the State cannot, without violating its own statutes, as well as long established principles of justice and law, lay claim to these lands on the ground of fraud in obtaining the original grants, even assuming that such fraud can be proved after all the parties to the transaction have ceased to live; or on the ground of non-performance of conditions contained in the original grants.

The Legislature have declared (2 R. S., 293) that "The people of this State will not sue or implead any person for or in respect to any lands, tenements or hereditaments, or for the issues or profits thereof by reason of any right or title of the said people to the same, unless

(1.) Such right or title shall have accrued within twenty years before any suit or other proceeding shall be commenced; or unless,

(2.) The said people, or those from whom they claim, shall have received the rents and profits of such real estate, or of some part thereof, within the said space of twenty years.*

The State is equitably and legally as much barred by this statute as is a private citizen, and our courts of justice have at all times sustained statutes of this character, and regarded them as eminently beneficial. A distinguished and learned judge in our own State has well said, (26 Wend. 609,) that "statutes limiting real actions generally operate in favor of men who cultivate the soil, or inhabit the dwelling houses of the country, and cannot discriminate between the rich and poor, the powerful and the weak, the wise and the ignorant. Looking to this tendency to encourage men not only in the pursuit of agriculture, but every great interest of the nation, an argument of policy arises for their equal and steady application, even more strong than statutes passed to limit personal actions. All however were framed on the most salutary principles of general policy. *They have with great propriety been termed statutes of repose.* They fix a term broadly marked and easily proved, at which litigation is arrested; beyond which every man is enabled to pronounce that his possessions are no longer open to disturbance. The great object no doubt was to interpose the presumption arising from delay, against the loss of evidence and the fictions of perjury; but on this view alone neither open wrong nor established fraud could be admitted as an exception, without striking at the principle itself; neither could be received without proof, and that would bring back the very danger which the statutes were intended to obviate."

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* By the Code of 1849, the time was altered to forty years.

Again he says, "in the very case before us the protection of the statute is sought to be withdrawn from the defendants, on the ground that they committed a fraud, some four full generations before the bill was filed. We are asked to throw both parties back upon the litigation of a documental title, which looks for its origin to the Dutch Dynasty before 1663, and which claims to have reached the defendants mainly, in a course of descent from that time. This it is conceded must be done, if at all, not merely through evidence obscured by the ordinary mists of tradition in a settled government, and under a well regulated system of conveyancing; but evidence which comes to us through the mutations of empires, the fury of revolutions, repeated changes in the law of descents, in the law of common assurances; and great defects at all times in the method of perpetuating the evidence of their existence."

The statute of limitations has ever been regarded as founded upon the wisest policy, and as standing on the general principle of public utility.

If these views of the general policy and expediency of maintaining statutes limiting the time for commencing actions for the recovery of real estate are correct, it is apparent that the State by prosecuting actions for the recovery of these manorial lands is setting up claims which cannot be sustained on well settled principles of law, and which are not sanctioned by any principle of right or equity, and that it is consequently the duty of the Legislature to provide some mode by which their further prosecution may be stayed. If the State had good title to the lands in question, it was bound like an individual to have sued for them before the expiration of twenty years from the time they were taken possession of, under a claim of title adverse to the State. The present occupants have been suffered to cultivate and improve these lands, without any claim being before made by the State to them, and it would now be grossly unjust to turn off the present occupants and appropriate their lands and improvements to its own use, and it would be equally unjust for the State to take from the landlords the estates which they have been suffered to hold in the same lands for the same time, even if the State had the legal right to do so.

These considerations bring your committee to an examination of the particular provisions of the bill referred to them, and to a statement of the objects which it seeks to accomplish. The intention and object of the bill is to provide a plan for a fair, just and equitable settlement and adjustment of the disastrous controversies which have so long existed between the landlords and tenants, by removing the only impediments alleged to be in the way of changing the tenures in question into absolute and unconditional estates in fee simple. It is asserted that the landlords are now willing to sell and the tenants to purchase and extinguish the rents, by the payment of a gross sum, on terms that would generally be satisfactory to both parties, but that such purchase and extinguishment cannot be made by the tenants, for the reason that the State has made a claim to these lands and is prosecuting suits for their recovery. This obstacle in the way of a purchase from the landlords by their tenants, this bill if passed into a law will wholly remove in case its terms and conditions are accepted by the landlords, and your committee entertain the hope and belief that if the impediments in the way of a purchase of the rents shall be removed by the passage of this bill, that the lease-hold tenures which have become so odious to the tenants and productive of evil consequences to the whole community, will be gradually extinguished by the voluntary agreement of the parties, who must by this time have become satisfied that the interests and welfare of all will be thereby greatly promoted.

The first and second sections of the bill propose to confirm on the part of the State, to the landlords and occupants of these lands, the estates and interests which they respectively claim to have in them, under leases in perpetuity; in all cases where the lands have been held under such leases for more than twenty years, adversely to the claim of the State; on condition that the landlords will consent to sell their right to the rents reserved and all the covenants, conditions, and reservations, contained in the leases at a gross sum which *at seven per cent interest* will yield an annual income *equal to the rent reserved.*

The first section also declares that "this act shall in all courts and places be held and construed to be *a full and complete confirmation* on the part of the people of this State of the respective titles, estates and interests" which the said landlords and tenants respectively claim to have in the lands in question.

It is also provided that where the rent reserved is payable in wheat, that the same shall be estimated at one dollar per bushel, or where the rent reserved is payable in articles other than wheat or in services, that the same shall be estimated at the market value thereof, and in case the parties cannot agree as to such market value, that the same shall be determined by two persons; one to be chosen by each party, and in case they cannot agree then by an umpire to be selected by the two first chosen as aforesaid.

The payment of a sum which at seven per cent interest will yield an income equal to the annual rent reserved in the lease, is to be taken and received by the landlord *in full satisfaction of all rents, covenants, reservations, quarter sales, or fines on alienation*, and by the third section it is provided that when any landlord against whom or whose tenant or grantee any suit shall have been commenced in the name of the people by the Attorney General, under the resolution of the 10th of April, 1848, shall serve on the Attorney General a notice in writing that he accepts and will comply with the conditions and provisions of this act; that then the Attorney General shall discontinue the suits so commenced against him.

If the view which your committee have taken of the duty and obligation of the government, in respect to the suits the State is now prosecuting for the recovery of the manorial lands is correct; it is then peculiarly just and right that the Legislature should put an end to the suits, and all doubt or question as to the title of the lands, by confirming such title to the landlords and tenants according to their respective estates which each claim to have therein; and the Legislature, in view of the great benefits which will flow from a settlement of the whole subject matter in controversy, may properly make such confirmation on such conditions as will tend to put an end to these leasehold tenures, and convert the same into unconditional absolute estates in fee simple.

The terms which the bill imposes as a condition to such confirmation, are believed to be extremely liberal towards the tenants, and such as many of them will now gladly accept, and such also as will be assented to by the landlords for the sake of ending the pending litigations and controversies. Indeed the terms of purchase proposed by the bill, are believed to be more favorable to the tenants than have been hitherto offered, and they have been made thus liberal, with a desire of inducing the tenants the more willingly to accept them.

When it is considered that there is and cannot be under the Constitution of the United States which forbids the passage of any law impairing the obligation of contracts, any other mode of changing these leasehold tenures or contracts than by voluntary purchase and sale, and that the bill under consideration, by removing the chief obstacle in the way, will probably facilitate such purchase and sale, and thereby put an end to the tenures which have been the occasion of such frequent complaints, on the part of the tenants, and productive of greatly injurious consequences to the whole community, your committee cannot doubt that it will receive the cordial approval of the Legislature and of the people, and they accordingly earnestly recommend its passage.

All of which is respectfully submitted.

CHAS. A. MANN,
GEO. R. BABCOCK.

[Bill introduced on notice by Mr. MANN, referred to the Judiciary Committee, and reported by a majority of that committee to the Senate.]

AN ACT

To settle the controversies existing between the State of New-York and certain occupants and claimants of land, and to confirm the titles to said lands.

Whereas, various tracts, manors or parcels of land in the counties of Albany, Schenectady, Rensselaer, Columbia, Ulster, Sullivan, Delaware and Schoharie, are held and occupied under grants in perpetuity, reserving rents, commonly called leases in fee: And whereas many of the occupants of the lands so held under said grants or leases, claim that the titles of their landlords or grantors respectively are fraudulent and void, as against the State, or have become forfeited by escheat or otherwise, and that therefore they cannot safely purchase the right claimed by said landlords or grantors in the said lands, or in the rents aforesaid: And whereas many of said occupants have expressed a desire to change the tenure of the lands held by them upon just and equitable principles, so that they may no longer be chargeable with a perpetual rent, but may own and enjoy the said lands in fee simple absolute: And whereas much controversy has arisen between the said occupants and landlords, or grantors, and several suits have been commenced in behalf of the State by the attorney-general, pursuant to a joint resolution of the two houses of the Legislature, passed on the 10th of April, 1848, to recover possession of some of the said lands: And whereas the public good will be greatly promoted by an amicable and fair adjustment of the said controversies, and of the suits so commenced in behalf of the State: And whereas the said lands have been held and occupied ever since the earliest settlement thereof by persons claiming adversely to the alleged right of the State: And whereas it is deemed unjust, alike towards the said occupants and landlords, for the State to seize upon and appropriate the said lands to its own use, after so long an acquiescence in an adverse claim: And whereas it has always been the policy of the State to discourage rather than to promote the advancement of stale claims to real property, and to prevent the disturbance of long established possessions, various statutes having been passed for the enforcement of this policy as against the State, and among its citizens: And whereas an observance of this policy on the part of the State is due alike to its own honor, the tranquility and prosperity of its citizens, and the security and permanent enjoyment of their property. Therefore:

The People of the State of New-York, represented in Senate and Assembly, do enact as follows:

SECTION 1. The respective titles, estates and interests now held and claimed by the landlords or grantors, and by their tenants or grantees in any lands situated in the counties of Albany, Schenectady, Rensselaer, Columbia, Ulster, Sullivan, Delaware and Schoharie, which lands shall have been actually possessed for more than twenty years last past, under any private grant or lease in perpetuity reserving rents, are hereby confirmed to the said landlords or grantors, and their tenants or grantees, according to their respective titles, estates and interests therein. And this act shall in all courts and places, be held and construed to be a full and complete confirmation, on the part of the people of this State, of the respective titles, estates and interests which the said grants or leases purport to convey or reserve.

§ 2. The confirmation declared in the preceding section of this act, is not to take effect except on the express condition that such landlord or grantor, on being paid the rent in arrear reserved in the grant or lease under which the land is occupied, and on being paid or satisfactorily secured the payment of a sum of money, which at the rate of seven per cent interest, will yield an annual income equal to the rent reserved in such grant or lease, shall by a proper instrument in writing release all the covenants, conditions and reservations contained in said grant or lease, to the owner or owners of the estate thereby granted, and to his, her or their heirs and assigns forever, or to such other person or persons as the said owner or owners may, by writing duly executed and acknowledged or proved, request or appoint. And in all cases where the said rent, or any part thereof is, by the terms of such grant or lease, made payable in wheat, the same shall be estimated for the purpose of determining the amount to be paid in lieu of the rents to become due, at one dollar per bushel; and where the said rents or any part thereof are made payable in any articles other than money or wheat, or in services, the said articles and services shall for the purpose aforesaid, be estimated at the market value of such articles and services to be ascertained in case the parties disagree, by any two indifferent persons, one of whom shall be chosen by the said landlord or grantor, and the other by the party from whom the said rent is claimed, or by such umpire as the said persons so chosen, in case of their disagreement, may select and appoint. And all other claims of the said landlord or grantor, of every description, in virtue of said grant or lease or of any reservations, conditions or covenants therein contained, shall be deemed satisfied and extinguished by the payments herein before provided for.

§ 3. Whenever any landlord or grantor of lands situated in one of the counties mentioned in the first section of this act, against whom or whose tenant or grantee a suit has been or shall be commenced by the attorney general in behalf of the state under and in pursuance of the concurrent resolution of the two houses of the legislature, passed on the 10th of April, 1848, shall serve on the attorney general a notice in writing that he accepts and will comply with the provisions and conditions of this act, then said attorney general shall discontinue the suit so commenced.

§ 4. Every tenant or occupant owning or claiming lands situated in any part of this state under any private grant or lease in perpetuity, or for life or lives, or years, reserving rent, which lands have been actually possessed by him and those under whom he claims, adversely to the state for more than twenty years last past, may purchase from the owner of such rent, or the reversion of such lands, all his estate and interest therein; and the release or conveyance of such owner shall be deemed, in all courts and places, a full and perfect release and conveyance to such purchaser of all the right and interest of the people of this state in and to the estate purported to be conveyed in and by such grant or lease, and in and by such release and conveyance aforesaid.

§ 5. Nothing in this act contained nor anything to be done in pursuance of it, shall affect the rights of any person claiming an estate or interest in the said lands or rents, adversely to the said landlords, grantors or owners respectively, or their respective grantees or lessees, or any one claiming under them or either of them; nor shall said act or anything to be done in pursuance of it, affect existing liens or incumbrances on the said lands or rents.

State of New-York.

No. 97.

IN SENATE, MARCH 28, 1850.

REPORT

Of the Commissioners of the Canal Fund in reply to a resolution of the Senate, passed March 14, 1850.

The Commissioners of the Canal Fund, in answer to a resolution of the Senate of which the following is a copy, viz:

"IN SENATE, *March* 14, 1850.

Resolved, That the Commissioners of the Canal Fund are requested to report to the Senate, at their earliest convenience, the general character and description, and the canals on which the same are to be made, of the 'costly improvements' spoken of at page eleven of their annual report, and on which they give it as their opinion that 'not less than one hundred thousand dollars will be expended during the current fiscal year,' and that they also report the information on which they base their estimate for such increase of expenditure for repairs, and also what in their opinion or belief will be the cost of completing the 'costly improvements' commenced on the completed canals of this State other than the Erie canal, and their opinion whether such contemplated 'costly improvements' are 'ordinary repairs' within the meaning of section one article seven of the constitution.

By order,

W. H. BOGART, *Clerk*."

Have the honor to

REPORT:

That the best view they can give of the general character and description of the work referred to in the report of the Auditor of the Canal Department to this Board, to which the inquiries of the said resolution are directed, will be obtained by examining the laws authorising such work, to which a general reference is made in the said report.

The act, chapter 348 of 1847, directs the rebuilding of the locks on the Cayuga and Seneca canal "of the same dimensions of the enlarged locks on the Erie canal," and authorises the Canal Commissioners to "diminish the number of the said locks, or alter their location, if in their judgment the interests of the State will be promoted thereby;" but these improvements are not to be made unless the estimates show that the expense will not exceed that of the stone locks as prescribed by the act of May 25, 1836, and their cost is directed to be charged to the fund appropriated to ordinary repairs. The act, chapter 213 of 1849, provides that "in rebuilding the locks on the Cayuga and Seneca canal, the Canal Commissioners are authorised, if they shall deem the interest of the State to require it, to separate this canal from Seneca river and construct an independent channel for the same from the head of lock number nine below Seneca Falls to the Montezuma level, crossing Seneca river by an aqueduct, thereby dispensing with the rebuilding of three locks, and that the expenses incurred under the said act shall be paid as directed by chapter three hundred and forty-eight Laws of one thousand eight hundred and forty seven. From the annual report of the Canal Commissioners it appears that they have adopted the changes authorised by this act, but we deem it unnecessary to report to the Senate the statements contained in public documents now on the tables of its members. Chapter 218 of the Laws of 1848, contains the provisions referred to by the Auditor in relation to the Chemung canal. This authorises the Canal Commissioners "to continue the Chemung canal from its intersection with Catharine creek by an independent channel northerly to the Seneca lake," and also "to change the course of Watkins creek to the lake, so as to protect the canal from injury by said creek." The act directs the expenses "to be charged to said canal as ordinary repairs."

The act in relation to the Oswego canal, passed May 12, 1847, provides that, " when it becomes necessary to rebuild any of the locks on the Oswego canal, it shall be the duty of the Canal commissioners to have such locks constructed of the same dimensions as the enlarged locks of the Erie canal," and appropriated $100,000 from the fund on hand before the adoption of the constitution, to defray the increased costs of the locks beyond the cost of reconstruction on the old plan ; and the act in relation to the Oswego canal, passed April 5, 1849, reiterates the said provision, and authorises the Canal Commissioners " to change the location of any of the said locks and to diminish their number, and to do the necessary section work to bring them into use," section three of the last mentioned act further provides that " whatever the expense of such enlarged locks shall exceed the estimated cost of locks of the present dimensions, shall be paid out of the money " provided by the said act ; and that the residue of such cost, with the cost of such other work as may be constructed under the said act, " shall be charged to ordinary repairs." These recitals of legal provisions show the general character and description of the work referred to, and the canals on which it is progressing; though the Senate will see, by recurring to the passage of the Auditor's report under enquiry, that the opinion there expressed that not less than $100,000 will be expended under the provisions of these laws during the current fiscal year, applies to the whole of the work authorised by the laws referred to, the most of which is there set forth as being for " reconstructing works on improved plans and charging the entire cost of reconstruction on the scale of existing works to ordinary repairs," and is not limited to what is included under the name of other " costly improvements." The information on which the Auditor's estimate for such increase of expenditures for repairs is based, is derived from the contracts on file in the Canal Department, and from the Canal Commissioners. The undersigned beg leave respectively to refer the Senate to the report of the Canal Commissioners, made to your honorable body on the 5th inst., Senate Doc. No. 83, for the particulars of such information, and also for an answer to the inquiry, what in the opinion or belief of the undersigned " will be the cost of completing the costly improvements commenced on the completed canals of this State other than the Erie canal," as the undersigned have no other information to guide them to an opinion on the subject except what is embraced in the said report.

The inquiry whether the improvements under consideration are ordinary repairs within the meaning of section one, article seven of the constitution, involves a question of construction which has already acquired a very great importance and may probably become still more serious. The constitution having failed to provide for any expenditures from the revenues of the canals upon any of the completed canals, except for "collection, superintendence and ordinary repairs," it becomes necessary in settling the various questions continually arising connected with the repairs and improvements of the canals, that some degree of certainty should be established in defining what may and what cannot be included in the definition or description of "ordinary repairs." The term ordinary repairs has long been in use in the legislation of the State in relation to the canals. It is used in defining the duties of the Canal Commissioners; and in prescribing the powers and duties of the Canal Board a distinction is made between ordinary and extraordinary repairs, and the latter are made to require the sanction of the board, and sometimes of the Legislature, before they can be undertaken, while each acting Commissioner is authorised to make the former as a part of his ordinary duty. After the passage of the stop law in 1842, under the pressure of the public anxiety to escape from the oppressive restrictions of that act, the Legislature in every year till the present constitution was adopted passed acts authorising the construction of new work, and directed the expense to be paid under the name of ordinary repairs. The history of previous legislation, applying to such interpretation at different periods to the words ordinary repairs, was before the convention which framed, and the people who adopted the constitution with the restriction referred to.

The Legislature of 1847, having in each house several members of the constitutional convention, to whom great deference is justly due in questions of construction, passed several acts directing new work to be charged as ordinary repairs, among which are the laws in relation to the Cayuga and Seneca, and Oswego canals, above mentioned.

In the rapid growth of the State in population and wealth, new and pressing demands have constantly arisen and may be hereafter anticipated for such improvements of the public works as will better adapt them to the convenience of business, and will impel the Legislature to the most liberal construction of their powers under the constitution to provide for such improvements.

While submitting the construction of the constitution in the particular referred to, to legislative discretion, so far as the power and action of the Legislature are concerned, the undersigned, in the exercise of their duties as members of the Canal Board, have uniformly held that they could authorise no work on or connected with the canals under the name of ordinary repairs beyond what the Canal Commissioners are severally authorised to do, to maintain the permanency and use of the canals without material change.

The undersigned are clearly of opinion that no portion of the canal revenues can be applied consistently with the provisions of the seventh article of the constitution, to the enlargement of any of the finished canals until after the Erie canal enlargement and the Genesee Valley and Black river canals shall have been completed. Where a necessity exists for the reconstruction of locks or other structures on the lateral canals, the expenditure must be provided for from that portion of the revenues applicable to ordinary repairs; but any additional outlay that may be required for the enlargement of these works, must obviously be supplied from other sources than the canal revenues. This principle was observed in the appropriation of $100,000 by the Laws of 1847 and 1849, from the means belonging to the Canal Fund prior to the adoption of the constitution in 1846, for the extra cost of rebuilding the locks on the Oswego canal on the enlarged plan. In carrying these and similar laws into effect, the Commissioners of the Canal Fund will deem it their duty to require accurate estimates and accounts distinguishing the additional cost occasioned by the enlarged dimensions of the works from that portion of the expenditure which is properly chargeable to "ordinary repairs."

WASHINGTON HUNT,
Comptroller.
CHRISTOPHER MORGAN,
Secretary of State.
ALVAH HUNT,
Treasurer.

State of New-York.

No. 98.

IN SENATE, APRIL 1, 1850.

REPORT

Of the Canal Board on the bill to supply the Black river canal and Black river with water.

Canal Department,
April 1, 1850.

The Canal Board, in answer to the following resolution,

" In Senate, *March* 21, 1850.

" *Resolved*, That the bill to supply the Black River canal, and the Black river with water, by damming the lakes at the head of Black, Moose, and Beaver river, be referred to the Canal Board to report their opinion as to the necessity and practicability of the objects contemplated in said bill, and the probable cost thereof.

" By order,
(Signed,) W. H. BOGART, *Clerk*.

Report:

That immediately on the receipt of the above resolution, the Canal Board sent directions to the resident engineer in charge of the Black River canal, to send to us the surveys and estimates for the work already done at the outlet of Woodhull and Wolf lakes, and the probable cost of the works contemplated in the resolution of the Senate, but up to this morning no answer has been received from him.

In the annual report of the Canal Commissioners for 1850, Assembly Doc. No. 45, at page 39, the Commissioners say, "the only difficulty arising, is the fact that the quantity of water in the river is not equal to the capacity of the feeder. There can be no doubt that resort must be made to reservoirs from the numerous small lakes lying from 10 to 20 miles east of the head of Black river feeder; not only to obtain the required quantity of water for the feeder, but to restore to the Black river the amount taken away, and thus prevent extensive claims for damages to water power on the river below. A survey has been made of two of those lakes, (the Woodhull and Wolf,) which cover an area of 1,163 acres; they receive the drainage of about 5,000 acres."

"A temporary dam of 5 feet high has been built across the outlet of Woodhull lake, costing $383.54. This dam was closed on the 9th of November, since which time the water has raised as follows:

November 13th,	4 days,	0.30 feet.
" 23d,	10 "	0.55 "
December 19th,	40 "	1.45 "

"There have been no heavy rains in the time, and perhaps it may be considered as about a fair average for the year. This would afford 670 millions cubic feet, provided the evaporation was in an equal proportion."

"But assuming that the evaporation is 12½ per cent greater for the year, than in the month of November, according to observations made by Mr. James Coffin, principal of the Ogdensburgh Academy in 1838, and see Assembly Doc. No. 96, page 48, of 1840, after making 12½ per cent deduction for evaporation it will leave 587 millions cubic feet as the supply. This will afford 9,000 cubic feet per minute for 45 days, and 16,000 cubic feet for 25 days."

"Other lakes have been examined, but not surveyed, which appear to afford equal facilities with the two above described, and there can be no doubt but that all the water can be obtained from this source which may be required."

From the information now in possession of the board, they are of the opinion that further expenditure will be necessary to return to the Black river an equal quantity of water which will be diverted from it to the Erie canal, and that this expenditure will be far below the cost of reservoirs on the other canals of this State.

All which is respectfully submitted.

CHRISTOPHER MORGAN,
Secretary of State.
WASHINGTON HUNT,
Comptroller.
ALVAH HUNT,
Treasurer.
CHARLES COOK,
FREDERICK FOLLETT,
Canal Com'rs.

State of New-York.

No. 99.

IN SENATE, MARCH 30, 1850.

REPORT

Of Standing Committee on Medical Societies and Colleges.

The standing committee on medical societies and colleges, to which was referred the memorial of J. B. Rich, and others,

REPORT:

That they have ascertained that, about five years since, Dr. John B. Rich, a citizen of the United States, residing in the city of New-York, established an institution for physical education, and had it fitted up at great cost, with every apparatus and convenience necessary to teach the system of physical training which he had adopted.

Dr. Rich has sustained his institution in the face of the usual obstacles which present themselves to every novel enterprise, be it ever so useful, and this perseverance on his part was to him during the first three years of the existence of his institution, a source of great pecuniary cost and loss.

Through the instrumentality of Dr. Rich's institution, mainly, the incalculable importance of the education of the body has become to be more duly appreciated by a large portion of the community in which Dr. Rich resides.

The institution now appears to be in a prosperous condition. At this time the buildings and accommodations are found to be insufficient for the wants of its present subscribers even, and it is considered desirable that a larger building, in a more central situation, should be forthwith erected.

Dr. Rich has not of himself sufficient means for this undertaking, and his present subscribers are desirous of forming themselves into a company, for the purpose of putting up such an edifice as will be at once an ornament to the empire city, and necessary to extend the field of physical education.

To enable them to do so, they petition your honorable body to grant them an act of incorporation, as they cannot be organized under any existing law.

During the time this institution has been in operation a large number of the most respectable citizens and their families have obtained health and advantage under its scientific discipline.

Your committee are impressed with the opinion that the subject of physical education, is a subject of paramount importance, and especially to the inhabitants of large cities. To the rising generation, of both sexes, the establishment of institutions like the present, where a well ordered physical education, under proper influence, can be imparted, cannot but be of the highest utility.

It would be, in your committee, an act of supererogation, were they to attempt to set forth in this report all that might be said in favor of physical education, scientifically conducted. The examples of the greatest republics the world ever saw, and the experience of all ages concur to make manifest beyond all reasonable doubt, its salutary tendency to improve the corporal powers of mankind, and to develope that form which its great Creator evidently intended should be the seat of perfect symmetry and beauty, the image of himself.

Philosophers and physiologists have observed, that the mind of man becomes more just, grand and capacious, in proportion as his body advances in health and muscular energy.

There are few who have had frequent occasion to observe, that the body is often only a feeble instrument, and sometimes even a burden to him whose corporal faculties have never been sufficiently developed, and that the mind has been as a sword wearing out the scabbard.

How many parents who are now mourning over the untimely loss of their promising offspring, might, all human probability, have been spared their unavailing grief, if precaution had been timely taken to give them a more masculine education.

But your committee further recognise the vast importance of such an institution, to the adult inhabitants of cities, to the merchants and professional men who are confined in their counting rooms and offices during the greater part of the day, and who cannot escape from the confinement of their business, to take daily walks or rides in the country.

The majority of Dr. Rich's present subscribers are composed chiefly of these.

Your committee, therefore, would recommend that the prayer of the petitioners be granted, and that the accompanying act be passed, to incorporate "Rich's Institute for Physical Training," in the city of New-York.

C. D. ROBINSON,
R. S. WILLIAMS,
B. BRANDRETH.

State of New-York.

No. 100.

IN SENATE, MARCH 3, 1850.

REPORT

Of the committee on roads on bridges, on the petition of sundry inhabitants of Yorktown, praying for the repeal of an act passed March 25, 1844, to revive an act for laying out a certain road in said town.

Mr. Miller from the committee on roads and bridges, to which was referred the petitions from inhabitants of Yorktown and others, praying for the repeal of the act passed March 25, 1844, entitled an act to revive and amend the act entitled "an act appointing commissioners to lay out a road from Peekskill in the county of Westchester to the store of James Towner in the town of Patterson in the county of Putnam, passed May 18, 1836," together with the remonstrances against the said repeal, having had the same under consideration, and heard the agents and counsel on both sides,

REPORTS:

The law of 1836 was intended to provide for the laying out and constructing a road to commence at the village of Peekskill on the Hudson river, leading (on a route parallel to a turnpike which was already constructed and in use for five miles in the same general direction) through a corner of the town of Yorktown, and through the town of Carmel to the store of James Towner in the town of Patterson, the towns of Carmel and Patterson being in the adjacent county of Putnam. The commissioners to lay out this road were to survey the route and record the same in the proper clerks' offices, and when so recorded the said route was duly settled and established, and their power over its location was exhausted. By some mistake the route certified to and recorded, (which was well and properly laid out in the county of Putnam) after it came into the county of Westchester, was made to run by the description recorded in one instance into the centre of a pond, and in another directly against the side of an impassable hill or mountain, where in both instances it was physically impossible to make the road; and as a necessary consequence the road was never either opened or worked in the county of Westchester; but it was duly opened and worked through the county of Putnam.

In the year 1844 the present law was passed on the petition of 22 inhabitants of that part of Yorktown through which or near which the road was to run. Of these 22 it is claimed only fourteen were free-holders, and ten of these by a memorial among the papers now on file in the Senate, represent that by their petition of 1844 they hoped "to obtain a road as near as might be to the route which was contemplated by the act of 1836, which was not designed to commence at the head of the five mile turnpike, but to commence at or near Peekskill, and run south of said turnpike." They further add, "that the special commissioners appointed by said act of 1844, having surveyed and laid out a road over an entirely different route from the one contemplated in the act of 1836, and thus disappointed a very large majority of the travelling community, you petitioners therefore pray your honorable body to repeal said act of 1844."

The supervisor of the town of Yorktown, Benjamin D. Miller, under date of January 14, 1850, thus writes to your committee: "The owners of a great portion of the land through which this road is to run, are willing to relinquish their assessment in case the road may be discontinued, and at least seven-eighths of the inhabitants of the town are opposed to the alteration of the road; and finally there is not more than one-quarter of the travel over this road at present that there was at the time this act was passed for the alteration of the road. At the time of the passage of this act there were several lines of stages that passed over this road from the village of Carmel in Putnam county to the village of Peekskill in Westchester county; but now the New-York and Harlem railroad passes this point in Putnam county, and there is hardly any travel of this kind; and the Hudson river railroad takes the travel from the other quarter, which makes it of very little importance as a public highway. Besides this intended alteration of the old road passes through a low swampy piece of ground which will make a very expensive road for the town of Yorktown." The conclusions in this letter of the supervisor of Yorktown, your committee from correlative testimony before them, are disposed to adopt.

The law for laying out of this road requires it to be laid three rods wide, and the old road over which for the most part it is laid, is not so wide, and hence the necessity of cutting by its lines, the fronts of door yards, and in one or two instances buildings were cut; this has made the damages to owners assessed and recorded up to January 26, 1850, (as appears by the certificate of the town clerk of the town of Yorktown,) amount to $3,361.43 in about two miles of distance or length of the new road. Of this amount the owners of $1,385.75, it is claimed have by written agreement released their claim, provided said road be not opened, which would leave $1,975.68 unrelinquished It is further claimed that this amount unrelinquished has been reduced to $1,017.24, but this last relinquishment is disputed. It is claimed in the principles laid down in a law case cited of the People vs Supervisors of Westchester county, that the damages unreleased will have to be paid to the persons to whom it is assessed by the town of Yorktown, although the road be not opened. This last consideration, if the rule of law is such, constitutes the principal objection to repealing the law.

The making of this road, including damages, is estimated to cost from $5,000 to $6,500 and the amount in distance saved is not to exceed a half mile, and will involve the necessity where the route is changed, in most instances, to leave the old road open for the convenience of the inhabitants who reside upon it, (as 14 buildings are situated upon the longest piece of the road cut off by the new route) If to these considerations be added the fact that the road to be straitened cuts across a corner of the town only, and ministers little or nothing to the convenience of the inhabitants who must pay the expense of it, in the opinion of your committee, it may well be questioned whether they should be subjected to this great expense for the *so small* convenience of *so few* others.

The point of this road where it commences on the county line in the town of Yorktown, is about equally distant from the railroads at Harlem and Peekskill, and it is natural to expect the travel to principally incline from the central point to the railroad nearest, which effect would certainly diminish the relative importance of having this road the *most direct* and level that could be secured by an expensive outlay.

The committee have therefore concluded to introduce the bill submitted to the Senate for the repeal of the law of 1844, referred to above, and recommend its passage.

State of New-York.

No. 101.

IN SENATE, MARCH 30, 1850.

REPORT

Of the Canal Board in answer to a resolution of the Senate.

Canal Department,
Albany, March 29, 1850.

To the President of the Senate:

The Canal Board, to which has been referred the following resolution, accompanied by the petition of Elizabeth S. Granger and others, and papers relating thereto.

In Senate,
March 19, 1850.

" *Resolved,* That the bill authorising the appraisal of canal damages to Elizabeth Granger and others, and the accompanying papers, be referred to the Canal Board for their opinion, and report whether the petitioners have any legal or equitable claim to the relief asked.

By order,
Signed W. H. BOGART, *Clerk.*

Respectufly Report:

That on the 10th day of October, 1826, Erastus Granger, of whom Elizabeth S. Granger is the widow, and Warren Granger and James N. Granger are the heirs, presented to the Canal Appraisers a claim for damages, in which he stated "that he was the proprietor of a farm containing about seven hundred acres, situate in the town of Buffalo, about a mile from the Niagara river, a part of which bordered on the Scajaquaddy creek, and twenty acres of it had been entirely ruined in consequence of the rise of water in the creek, caused by the erection of a dam at the lower end of Squaw Island.

The board of appraisers passed upon this claim, and adjudged "that the benefits and advantages arising from the canal are equal to the loss and damage the claimant has sustained."

In 1833, Senate Doc. No. 78, and in 1834, Senate Doc. No. 27, the Canal Commissioners, to whom was referred the petition of Elizabeth S. Granger and others, praying relief from the injury sustained by damming the Conjockety (or Scajaquody) creek by the works of the Erie canal, reported, "that whatever claims the petitioners had upon the State for the flowing of their lands by the State works at Black Rock Harbor, have been passed upon by the Canal Appraisers, which, in the opinion of the Commissioners is final and conclusive as to that part of their claim."

The petitioners in 1833, allege, "that the atmosphere in that vicinity is rendered unhealthy by such overflowing, and the inhabitants subjected to fevers," and "pray that a law may be passed, authorizing the Canal Commissioners to make a dam across the said creek, a short distance above its mouth, and turn the water through an artificial channel into Cornelius' creek, which would reduce the Conjockety to its natural bed, and remove every cause of complaint."

On a reference of this petition, the Canal Commissioners of that year, in their report, admit "that the construction of the dam and pier at Black Rock has caused the injury complained of by the petitioners, but that they did not know the extent of it," and suggested that as inasmuch as the Conjockety and Cornelius' creek were nearly upon the same level, "making a dam across the Conjockety creek near its mouth, and turning the water through an artificial channel into Cornelius' creek" would not remedy the evil complained of, but added, "perhaps a culvert might be so constructed as to take the waters of this creek under the canal into Niagara river, which would lower the creek four or five feet," which is equal to its rise caused by the State works at Black Rock harbor.

In 1839, the Canal Commissioners, in order to remedy the evil complained of, and in obedience to a resolution of the Senate of April 16, 1839, caused a survey and estimate to be made of the most feasible plan for discharging the waters flowing the lands adjacent to Scajaquoddy creek, and reported (Senate Doc. No. 92 of 1840) the cost of the proposed improvement as estimated by the engineer at $10,500.

The Legislature, in 1840, passed an act authorizing and directing the Canal Commissioners "to construct a dam across the Scajaquoddy creek, in the town of Black Rock, and excavate a channel for said creek, across the intervening lands, to Cornelius' creek, and construct the necessary and proper erections to protect such new channel, in such manner as to drain the lands above said dam, overflowed by reason of the back water from Black Rock harbor;" in obedience to which, the work was put under contract, and the contractors commenced work in January, 1841, and prosecuted it until November, 1841, when they ceased work, and the contract was declared abandoned.

The Commissioners report (Assembly Doc. No. 27, of 1815) that the sum of $2,635 had been estimated and paid to the contractors previous to the time of abandonment, being about one-fourth part of the amount required to complete the work, and stating that it would require $8,000 to finish it.

In 1847, the Legislature passed an act appropriating $8,000 to complete this work, and the Commissioners advertized for proposals. On the day of letting, it was found that none of the proposals were within the amount appropriated, the lowest being over $10,000; consequently, the work was not awarded to any of the bidders.

By act, chap. 63, Laws of 1848, the appropriation for this work was increased to $10,500; and the Canal Commissioners report (Assembly Doc., 1849, No. 40) that "it is now completed, and the waters of the Scajaquaddy discharged into Cornelius' creek, and passed, by a culvert under the canal, into Niagara river, below the Black Rock dam.

The Commissioners, in their report last referred to, state that "this has been a much more difficult work to construct than was anticipated, owing to the hardness and extreme tenacity of a large portion of the materials to be excavated."

To secure the benefit which was expected to be derived from this improvement, and prevent flooding the lands adjacent to Cornelius' creek, it was found necessary to do some excavation not included in the original estimate, in straightening the channel of this creek in order to give a free flow of the stream, increased, as it would be, by the waters of the Scajaquaddy.

These circumstances have greatly increased the expense beyond what was originally anticipated, and beyond the appropriations for the work.

A final estimate was made by the resident engineer having charge of the work, by which it appeared that there was due to the contractor $1,591.34 beyond the amount appropriated by the Legislature; and, in consequence of a disagreement of opinion between the resident engineer and the contractor, in relation to the character and classification of a part of the material, affecting the amount the contractor would be entitled to receive under the contract, the matter of difference was, in accordance with the provisions of the contract, and in pursuance of chap. 278 Laws of 1847, submitted to an arbitration, and an award was made in favor of the contractor, $12,593.85 over and above the final estimate of the said engineer. These two amounts, making $14,185.19, were appropriated by chap. 51, Laws of 1849, to pay the contractor in full for constructing the work.

From this, it appears that the expense of the improvement is as follows:

Amount paid previous to abandonment, ...	$2,635	00
Appropriation of 1848, ...	10,500	00
do 1849, ...	14,185	19
	$27,320	19

The foregoing is a statement of all the facts and information in relation to the claim of the petitioners, and the matters connected therewith, in possession of this department.

All which is respectfully submitted.

CHRISTOPHER MORGAN, *Secretary of State.*
WASHINGTON HUNT, *Comptroller.*
LEVI S. CHATFIELD, *Attorney-General.*
ALVAH HUNT, *Treasurer.*
H. C. SEYMOUR, *State Engineer and Surveyor.*
CHARLES COOK,
FREDERICK FOLLETT, *Canal Commissioners.*

State of New-York.

No. 102.

IN SENATE, APRIL 2, 1850.

COMMUNICATION

From the Canal Board, transmitting the report of D. C. Jenne, Resident Engineer, in relation to the supply of water for the Black river canal and Black river.

Canal Department,
April 1, 1850.

To the President of the Senate:

Since the report of this Board to the Senate this morning, in relation to reservoirs to supply the Black river canal, and Black river, with water, the report of D. C. Jenne, Resident Engineer in charge of that canal, on this subject, has been received, and is herewith transmitted to the Senate.

CHRISTOPHER MORGAN,
Secretary of State.
WASHINGTON HUNT,
Comptroller.
ALVAH HUNT,
Treasurer.
CHARLES COOK,
FREDERICK FOLLETT,
Canal Com'rs.

REPORT

Hon. Canal Board:

The undersigned, in accordance with instructions received from Hon. Charles Cook, Canal Commissioner, bearing date the 25th inst., relative to a resolution of the honorable the Senate, passed March 21st, of which the following is a copy:

"IN SENATE, *March* 21*st*, 1850.

"*Resolved*, That the bill to supply the Black river canal, and the Black river, with water, by daming the lakes at the head of Black, Moose and Beaver rivers, be referred to the Canal Board, to report their opinion as to the necessity and practicability of the object contemplated in said bill, and the probable cost thereof.

By order.

"Signed, W. H. BOGART, Clk."

Respectfully submits the following

REPORT.

The Black river canal diverges from the Erie canal at the village of Rome, and terminates at the village of Carthage, in Jefferson county, a distance of about 77½ miles. Of this distance about 35 miles is to be an independent canal, and the balance of 42½ miles, slackwater navigation of the Black river. To this is added a navigable feeder 10 miles in length, taken from the Black river, about 20 miles above the High Falls, or the point where the canal enters the river.

The feeder is also designed as a feeder for the enlarged Erie canal, and has been extensively relied on in all the original estimates for a supply of water for said canal.

The capacity of the feeder is such as to pass 16,000 cubic feet per minute; and the surplus beyond what is necessary to supply the Black river canal, will pass to the Erie.

All the measurements which were taken in the early progress of this work, have made the volume of water in the Black river, at the point where it is diverted, from 14,000 to 16,000 cubic feet per minute, at its minimum flow.

The amount of water in the Black river at the place above referred to, at its lowest stage, during the summer of 1849, was only about 9,000 cubic feet per minute; making a deficiency of former estimates of from 5,000 to 7,000 cubic feet per minute.

It should be remarked here, however, that the water was lower than ever before known by them who have been familiar with the river for the last thirty years.

Nearly the whole volume of water was diverted for about 3 months in 1849 to feed the Erie canal, which left the river nearly dry from the head of the feeder to the high falls, and reducing it from 30 to 40 per cent below the falls. Moose river enters the Black river a few rods above the falls, and Beaver river 32½ miles below.

There is extensive water power between the head of the feeder and the high falls, which was almost entirely useless during the time the water was diverted from the river in 1849, and the water power between the falls and Lake Ontario was materially injured, rendering a considerable portion of it (as I am informed,) nearly unavailable.

Unless an amount of water be restored to the Black river equal to the quantity thus diverted for the supply of the Black river and Erie canals, heavy damages to water power will ensue, the amount of which will be almost incalculable.

The plan proposed by this department to obtain an increased supply of water for the purposes above mentioned, is to construct reservoirs of the numerous lakes situated from 10 to 20 miles east of the head of the Black river feeder.

The Wood Hull has its source from these lakes, and is a prominent branch of the Black river, entering the same about three-quarters of a mile above the State dam.

By the directions of Hon. Nelson J. Beach, late Canal Commissioner, surveys of two of said lakes, viz: the Wood Hull and Wolf, were made in September and October of 1849, which were found to contain an area of 1,163 acres, receiving a drainage of about 5,000 acres of land. These two lakes are near each other, and on about the same level; the Wolf lake emptying into the Wood Hull.

A temporary dam was constructed across the outlet of Wood Hull lake, which would raise the water about five feet. It was closed on the 9th of November last, and the reservoir was filled in 110 days; there was nothing more than an ordinary flow of water during the mean time, as the surface of the ground was for the most of the time covered with snow in the vicinity of these lakes, and was four feet deep when the water commenced running over the dam.

From all the facts in my possession, I am of the opinion, that if the dam had been raised to a height of 12 feet, and closed on the 20th of September, it would have filled by the 10th of June; and that the surface would have been increased about two-fifths, making 1,637 acres; and an average of 1,400 acres, by 12 feet in depth would afford a reservoir of 731,808,000 cubic feet capacity.

This would furnish 9,000 cubic feet per minute for 56½ days, and 16,000 cubic feet per minute for 31¾ days.

I have assumed that 110 days would be about the time that an increased supply of water would be necessary to draw from the reservoir, and that the ordinary flow into it during the 110 days would be equal to the loss from evaporation and filtration.

If this be a correct basis, it would then require two reservoirs of dimensions like the above, to keep up the supply, or restore the 9,000 cubic feet per minute, and about 3½ such to make good the 16,000 cubic feet per minute.

There is a continuous chain of lakes within a few miles of those above described, which are sources of the Wood Hull creek, and which, from the best information I can at present obtain, can be turned into reservoirs, with equal facilities, and at about the same expense.

These last mentioned lakes have not been examined by myself or my assistants, and I can only report, therefore, from general information. I have, however, no doubt but that the above quantity of water can be obtained from these sources.

The cost of constructing a reservoir of the Wood Hull and Wolf lakes, according to the plan above mentioned, is estimated at $4,200.

I am of the opinion that the probable cost of all the reservoirs that may be necessary in the vicinity of these lakes, will not exceed $10,000.

As to the necessity and practicability of constructing reservoirs on the head waters of the Moose and Beaver rivers, I would state that the sources of these rivers and the lake from which they flow, have not been examined by myself or my assistants, and therefore I can only base my conclusions upon general information.

At the head of the Moose river the natural advantages afforded for a reservoir are considered almost unsurpassed. The outlet of the lower lake is narrow, with prominent banks on each side, whereby the expense of daming will not be great, and an area of several square miles can be flowed with a low dam.

I am not in possession of sufficient data on which to base an estimate of the cost of constructing reservoirs at the head of these streams, but I should consider it safe to assume that they could be built at about the same expense as those at the Wood Hull and Wolf lakes

While it must be apparent that the reservoirs on the Moose and Beaver rivers will not result in an equal amount of benefit that they would if the water was rendered available at the State dam, yet it should not be forgotten that they will vastly enhance the facilities of navigating the Black river, not only by retaining the surplus water in time of floods, affording greater security to the improvements on the river, but also increasing the depth of water in the river at a time when it would otherwise be low. I would add in conclusion, that these sources would furnish such an ample supply of water as to satisfactorily adjust all claims in future relative to damages to water power on the Black river, below High falls.

DANIEL C. JENNE,
Resident Engineer.

Engineer's Office,
Boonville, March 30*th*, 1850.

State of New-York.

No. 103.

IN SENATE, MARCH 1, 1850.

REPORT

Of the Trustees of the New-York Dispensary.

To the HONORABLE THE LEGISLATURE
Of the State of New-York:

The trustees of the New-York Dispensary

RESPECTFULLY REPORT:

That during the past year 44,379 patients have been gratuitously attended to by the physicians of the institution, and furnished with the requisite medicines: Of these,

There have been attended at the dispensary,	33,427
" " at their dwellings,	9,700
" " vaccinated at the dispensary,	1,252
Making a total of,	44,379

The trustees have used their best efforts to keep a supply of vaccine virus, and to comply with all the requisitions of the act granting the appropriations to the dispensary; and they deem it proper to add, that the experience of the house physicians, (one of whose duties it is to attend to the vaccine department,) shows most conclusively the effectual protection against small pox afforded by proper vaccination.

Further particulars are detailed in their annual report, copies of which the trustees have the honor to present herewith, and to which they respectfully beg your reference.

Of the 44,379 patients attended to during the past year, more than two-thirds were born out of the United States, and have therefore been contributors to the passenger fund, from which the sum appropriated to the dispensary is drawn.

The private contributions, with the appropriation from the city government, would be sufficient to support the institution in the aid it affords to the native inhabitants; but in extending its charity to the class above alluded to, the aid of the Legislature becomes necessary to enable the trustees to carry out the benevolent object of its founders. When, therefore, it is considered, that by the medical advice, medicine and vaccination thus gratuitously administered, thousands of the emigrants arriving on our shores are probably saved from becoming a helpless charge upon the public, the trustees cannot but believe that the claim of the dispensary upon the bounty of the State will be duly estimated.

By order of the Board,

E. W. LAIGHT, *President.*

JAMES F. DEPEYSTER, *Secretary.*

New-York, January 29, 1850.

State of New-York.

No. 104.

IN SENATE, MARCH 27, 1850.

ANNUAL REPORT

Of the Treasurer of the Sailors' Snug Harbor.

To the Honorable, the Legislature of the State of New-York:

The annual report of the treasurer of the "Sailors' Snug Harbor in the city of New-York," showing the receipts and disbursements on account of the trust from the 31st December, 1848, to the 31st December, 1849; also showing the present state of the funds, and estimate of income for the year 1850.

Receipts.

Balance of cash in hand on 31st Dec., 1848,		$7,765 10
Cash received for consents to transfer leases,		26 00
do principal of Aaron Clark's bond and mortgage,		10,000 00
Cash received, supplies furnished resident physician,	$41 74	
Cash received, supplies furnished resident chaplain,	17 87	
Cash received, supplies furnished to the Governor, and for proceeds of sundries sold by him to others from the farm, and from supplies,	309 72	
		369 33

Cash received for interest on $10,000 of U. S. Treasury notes,	600 00
Cash received for interest on bonds and mortgages,	4,511 00
do for ground rents outstanding on 31st December, 1848,	1,171 88
Cash received for ground rents on lots in 15th ward for year 1849,	28,931 12
Cash received for ground rents on lots in 1st ward for year 1849,	2,425 00
	$55,799 43

Disbursements.

"Seamen's Bank for Savings," a special deposite,		$10,000 00
Repairs and improvements on buildings and grounds,		7,025 19
Furniture, beds, bedsteads, bedding, crockery, cutlery, bureaus, wardrobes, &c., &c.,		1,056 24
Freight,	$179 53	
Subscription to newspapers,	34 50	
Ensigns,	9 62	
Check and bank books,	11 75	
Interments, digging graves, and coffins,	132 50	
Funeral expenses of C. J. Smith,	20 00	
Rents of offices,	200 00	
Petty expenses of treasurer,	17 65	
Contingent expenses, viz: postages, house cleaning and white-washing, filling ice houses, stationery, trustees' table, carriage hire, blacksmithing, sand, rope, baskets, clock, &c.,	258 24	
Taxes and insurance,	751 71	
Salaries of governor, chaplain, physician, agent and treasurer, including additional compensation to Rev. Mr. Grigs,	5,891 66	
		7,507 16
Expenses of the farm, including wages of farmer, two assistants, and gardener, $185,—for a horse, for manure, seed potatoes, trees, &c.,		1,332 20
Groceries, flour, butter, &c.,	7,215 52	

Fuel—coal, wood, charcoal,............	1,659 54	
Light—oil,...........................	179 15	
Butcher, for meat,....................	5,165 12	
Drugs and medicines,..................	66 22	
Wearing apparel, including shoes,.......	3,101 02	
Support of two men at Bloomingdale asylum,	298 88	
Support of one man for part of year at New-York eye infirmary,............	50 17	
Wages of steward, matron, baker, cook, nurses, laundresses, seamstresses, &c.,..	2,778 00	
		20,513 62
Balance of cash in bank on 31st December, 1849,...		8,365 02
		$55,799 43

Funds of the Trustees of the Sailors' Snug Harbor.

Bonds and mortgages,................	$62,800 00	
United States treasury notes at cost,....	10,450 00	
Seamen's bank for saving, special deposite,	10,000 00	
Cash in bank on 31st December, 1849,..	8,365 02	
		$91,615 02
Ground rents outstanding in First ward,	$425 00	
do do Fifteenth do	815 38	
Interest do	175 00	
		1,415 38
		$93,030 40

Estimated income for the year 1850.

Interest on bonds and mortgages,.......	$4,336 00	
do treasury notes,.............	600 00	
Ground rents on lots in 1st ward,.......	2,850 00	
do do 15th do	29,856 50	
		$37,642 50

JOS. GREENLEAF,
Treasurer.

New-York, December 31, 1849.

The Executive Committee of the Board of "Trustees of the Sailors' Snug Harbor in the city of New-York," having attended to the duties assigned them pursuant to a standing order of the Board,

REPORT:

That they have carefully examined the Treasurer's accounts from the first day of January to the thirty-first day of December, one thousand eight hundred and forty-nine, and have examined the vouchers for the disbursements, ; they have also examined the bonds and mortgages, and stocks, (being United States Treasury notes and a special deposite in the " Seamens' Bank for Savings,") and have found the same to be in all respects correct, and that there is a balance of cash in favor of the Trustees of eight thousand three hundred and sixty-five dollars and two cents, ($8,365.02) and that the same is in deposit in the "Seamen's Bank for Savings," to the credit of the trustees. *New-York*, 31*st December* 1849.

M. H. GRINNELL,
President of the Chamber of Commerce of the city of New-York and Chairman of the Ex. Com. of Sailors' Snug Harbor.

CHAS. H. MARSHALL,
President of the Marine Society and a member of the Ex. Com.

F. A. TALLMADGE,
Recorder, &c.

State of New-York.

No. 105.

IN SENATE, APRIL 4, 1850.

REPORT

Of the majority of the Select Committee appointed to investigate the charges of alleged frauds on the Chemung Canal.

The undersigned, the majority of the select committee appointed by the Senate to investigate the charges of alleged frauds on the Chemung canal,

REPORT,

That on the fourteenth day of March, 1850, they respectively received from the clerk of the Senate a certified copy of a resolution, in the words following:

IN SENATE, *March* 14, 1850.

Resolved, That a select committee, consisting of Senators Guinnip, Schoonmaker, and Upham, be appointed to investigate the charges of alleged frauds on the Chemung canal, preferred by the Senator from the 26th district against the conduct of the Commissioner in charge, and be authorized to proceed to the village of Jefferson, Chemung county, to investigate the said alleged frauds, and to report to the Senate without delay.

WILLIAM H. BOGART, *Clerk*.

(A copy.)

That, being desirous of proceeding in the discharge of their duties under such resolution, the undersigned, on the following day, addressed and forwarded a note to the chairman of the committee, of which the following is a copy :

SENATE CHAMBER,
Albany, *March* 15, 1850.

HON. GEORGE B. GUINNIP, *Chairman*, *&c*:

Sir—Having been notified by the clerk of the Senate of the reinstatement of the committee to investigate certain charges of fraud in relation to the construction of the Chemung canal, we hereby respectively notify you that we are now ready to proceed in the investigation, and ask you to call an early meeting of the committee, for the purpose of making the necessary arrangements. An answer is requested.

Yours, respectfully,
M. SCHOONMAKER,
A. S. UPHAM.

That on the morning of the 16th, the undersigned received a reply to such note, addressed to them in the following words :

SENATE CHAMBER,
March 15, 1850.

GENTS :—I have received your note of this date, requesting me to call an early meeting of the committee to investigate certain charges of fraud in relation to the construction of the Chemung canal, for the purpose of making the necessary arrangements to proceed in the investigation. Having in my place in the Senate declined to act on that committee, I cannot, of course, take any action in the matter as a member of the committee.

Respectfully yours,
G. B. GUINNIP.

The undersigned, after the receipt of such note, not being aware that there had been in fact any formal resignation by the chairman of the committee, or that, if made, it had been accepted by the Senate, waited for his action until the 19th day of March, when they addressed and caused to be delivered to him a note, of which the following is a copy.

Albany, *March* 19, 1850.

Hon. Senator Guinnip :

Sir—The committee of investigation, in relation to alleged frauds on the Chemung canal, will meet at the room of Mr. Schoonmaker at the City Hotel to-morrow, Wednesday morning, at half-past nine o'clock, for the purpose of making the necessary arrangements to proceed in the investigation.

Your attendance is requested.

Yours, &c.,
M. SCHOONMAKER,
A. S. UPHAM.

At the time and place designated in such note, the undersigned attended, but the chairman of the committee did not attend. At that meeting, it was

Resolved, That the committee would proceed on Wednesday, the *27th* of March to Jefferson, in the county of Chemung, to investigate the alleged frauds.

At that meeting, the committee also received a communication from the canal commissioner in charge, of which the following is a copy:

Albany, 20 *March*, 1850.

To the select committee, appointed by the Senate to investigate certain preferred charges of fraud on the Chemung canal.

Gentlemen—I require that the testimony of Senator Guinnip, in relation to the charges of fraud to be investigated by you, may be taken by you before the departure of the committee for Chemung, at such time and place as the committee may designate.

Very truly, your ob't servant,
CHARLES COOK, *Canal Comm'r.*

On receipt of this communication it was

Resolved, That the committee would meet at the room of Senator Upham, at the City Hotel, on Friday evening, the 22d March, at 8 o'clock, P. M., for the examination of Senator Guinnip.

On the 22d March, at the request of the Canal Commissioner, a subpœna was issued and delivered to the sergeant-at-arms, to procure the attendance of Senator Guinnip, returnable that evening at 8 o'clock at the room at Senator Upham.

At the time and place appointed, the undersigned attended, ready to proceed in such examination, and they were also attended by said Canal Commissioner. The subpœna was returned duly served, but Senator Guinnip did not attend, and his examination could not, therefore, be taken.

That on the 23d day of March the undersigned caused to be delivered to Senator Guinnip a notice, of which the following is a copy:

"SENATE CHAMBER, *March* 23, 1850.

"Sir: You are hereby notified, that the select committee appointed to investigate the charges of alleged frauds on the Chemung canal, preferred by you against the conduct of the Commissioner in charge, have resolved to leave for Jefferson, in Chemung county, on Wednesday next, to proceed in such investigation.

"Yours, &c.,
"M. SCHOONMAKER.

"Hon. SENATOR GUINNIP."

On the 27th March, the undersigned, in obedience to the requirements of the resolution of the Senate, proceeded to the village of Jefferson, and entered upon the investigation of the alleged frauds.

In such investigation they enquired into the charges preferred by the Senator from the 26th, and which as served by him on the Canal Commissioner in charge, under the order of the Senate, are in the words following, to wit:

The charges to be investigated by the Senate Committee appointed to investigate the doings of the acting Canal Commissioner on the Chemung canal, under the act in relation to the Chemung canal, passed April 10, 1848.

"*First.* The said Commissioner has caused the construction of the Chemung canal from its intersection with the Catharine creek to the Seneca lake, to be made and constructed of greater dimensions than authorised by law, and greater than the Chemung canal, as said canal was by law designated and surveyed; thereby increasing the cost of the work beyond what was authorised by the act, chap. 218 of the Laws of 1848.

"*Second.* That said Commissioner has enlarged the Chemung canal, from its intersection with Catharine creek to lock No. 1, without any authority of law.

"*Third.* The said Commissioner has, at the public expense, moved a waste-weir from lock No. 1 to lock No. 2, on said canal, by which the waste water from said canal is now discharged into the millpond of his flouring mill, thereby increasing his supply of water without in any way benefiting said canal; and that he has directed the expenditure of public money in docking up portion of said canal between Lock No. 1 and 2, and on which portion of said canal, said Commissioner owned a mill, two warehouses and a glass factory; and that he has also expended the public money in docking up a basin on which his storehouse stands.

"*Fourth.* That said Commissioner was interested in real estate of large value adjoinining said canal, which was intended to be benefitted by the enlargement of the work beyond what was authorised by the law of 1848, and that he was thereby influenced to make a larger expenditure of public money than the law authorised, or than was contemplated by the Legislature in the passage of the aforesaid law of 1848.

"*March* 2, 1850.

"Signed G. B. GUINNIP, *Ch'm.*

"*To the Canal Commissioners*
of the State of New-York."

The chairman of the committee, Senator Guinnip, not attending the undersigned, were compelled to proceed without his aid. The undersigned, for the purpose of having a full understanding of the matters to be investigated, made a personal inspection of the canal and the works constructed, and in progress thereon, from the harbor at the head of Seneca lake, up to lock No. 4, on the Chemung canal. They also examined a large number of witnesses, as well upon the matters embraced in the several charges above set forth, as those contained in the memorial relative to shutting the water of Catharine creek, off from said canal, a copy of which memorial is hereinafter set forth, which testimony is hereto appended, marked scheduld A.

The undersigned desiring to make the investigation as thorough as possible, and determined to ferret out fraud, if any existed, did not content themselves with the examination of such witnesses only as are offered on the part of the defence, but they endeavored, in relation to each item of alleged fraud, to ascertain the source from which the complaints or charges originated, and caused the persons by whom they were originated, to be brought before them, and examined in relation thereto, and they also procured to be subpœnaed and examined all persons referred to by such persons, as authority, or supposed by them to know any thing in relation to the matters to be enquired into.

The undersigned understood as well from the remarks made by the Senator from the 26th, when his resolution was originally introduced, as from other sources, that most of the charges thus preferred by the Senator, were based upon a memorial adopted at a meeting of sundry inhabitants in the village of Jefferson, in relation to the alleged enlargement of the canal. They therefore subpœnaed before them, and examined in relation to the matters set forth in such charges, J. Q. Leake, the author of such memorial, and all persons suggested or referred to by him, as being able to furnish the undersigned any information on the subject. By his testimony, it appears that the memorial was presented by him to a meeting attended exclusively by inhabitants of the village of Jefferson; and that it was adopted by such meeting held in a bar-room, when about fifteen or twenty individuals only were in attendance.

The undersigned will now proceed and give the Senate the result of their investigations, and the conclusions at which they have arrived.

The first charge made against the Canal Commissioner, is "that the said Commissioner has caused the construction of the Chemung canal, from its intersection with the Catharine creek to the Seneca lake, to be made and constructed of greater dimensions than authorised by law; and greater than the Chemung canal, as said canal was by law designated and surveyed. Thereby increasing the cost of the work beyond what was authorized by the Act, chapter 218, of the law of 1848."

The Commissioners, in the construction of such portion of the Chemung canal as is included in this charge, proceeded under chapter 218, of the laws of 1848, entitled "An act in relation to the Chemung canal." This act consists of a single section, and is as follows:

"SECTION 1. The Canal Commissioners are hereby authorized to continue the Chemung canal from its intersection with Catharine creek, by an independent channel, northerly to the Seneca lake, west of the mouth of said creek; such intersection with the lake, shall be through the navigable straight cut already constructed by the State, unless in the judgment of said Commissioners, the interests of the State will be best promoted by connecting it with the lake at a point nearer the mouth of said creek. They are also authorized to change the course of Watkin's creek to the lake, so as to protect the canal from injury by said creek, and the expenses incurred under this act, to be charged to said canal, as ordinary repairs.

In order properly to understand whether the Commissioner under such law, has or has not been guilty of a violation of its intention and provisions, it will be necessary to refer to the situation of the canal at the time of, and the causes and objects which led to the passage of the act.

The act for the construction of the Chemung canal was passed in the year 1829, and the canal was shortly thereafter constructed from lock No. 1, at the village of Havana to Elmira, under such law. The act does not specify or direct what should be either the size of the locks or of the canal, but the Commissioners, in its construction, built it 26 feet in width at bottom, and for four feet depth of water. From lock No. 1 they used Catharine creek as a channel for navigation to Seneca lake, except a short cut near the head of the lake which was an independent channel. Such mode of communication was continued until the year 1841, when the navigation was separated from the creek for the distance of about one and a quarter miles from lock No. 1, and an independent channel constructed called the Brayton cut. Such channel was constructed and became necessary by reason of the said creek theretofore used down to that point, having become so filled with deposits that it was no longer navigable for canal boats. Prior to 1848, the balance of said creek so used for navigation as aforesaid, became so filled up and obstructed by deposits that much inconvenience and delays were occasioned to boatmen and others navigating said canal. The necessity of an independent channel thus became apparent if navigation was to be continued on said canal. The deposits being occasioned principally by freshets in the creek, they would be in a great measure obviated by an independent channel unaffected by such causes.

In the original construction of the Cayuga and Seneca canal terminating at the foot of Seneca lake, the engineer in charge made an error in the estimate of the cut at low water mark in said lake. In order to make up for said erroneous estimate it became necessary to dam up the waters of said lake, and thereby raise the water level thereof to render said canal navigable. Such raising of the water of said lake necessarily flooded the lands of many of the citizens at the head and borders of said lakes; created marshes and unhealthy miasma where theretofore the land had been good and tillable, and thus injuriously affecting not only the property but the health of the inhabitants. This naturally caused much complaint, and thenceforward the Legislature were called upon year after year to relieve the inhabitants by the removal of the obstructions and the reduction of the lake to its ordinary level.

In the construction of the Chemung and Crooked Lake canals, the same erroneous estimate of the water level of the Seneca lake was adhered to; both of such canals terminating and connecting themselves with said lake. The obstructions in the outlet and the consequent raising of the water of the lake was therefore indispensable to maintain the navigation of these several State canals until the lake level in such canals should be altered to correspond with the natural level of the lake. And it appears by the reports of the Canal Commismissioners almost annually from the year 1837 down, that even with the increased depth of water in the lake, the navigation of the lake level in the Cayuga and Seneca canal was at some seasons of the year imperfect and difficult for the want of a sufficient depth of water.

Various laws were passed by the Legislature on this subject prior to 1848, but all failed in affording the requisite relief, either by reason of their inefficiency or not being fully carried out by the then Canal Commissioners.

In January, 1848, a petition was presented to the Assembly from a very large number of the inhabitants of Havana, Chemung county, reciting their grievances and requesting the Legislature "to direct the Canal Commissioners to deepen the levels of the Cayuga, Seneca and Chemung canals which connect with the lake and remove the obstructions in the outlet." Such petition on the 15th day of January, 1848, was by a resolution of the Assembly referred to the Canal Commissioners, and they were requested to report to the Assembly on the subject.

Immediately on receiving such reference the Canal Commissioners directed Charles W. Wentz, a civil engineer in the employ of the state, "to make an examination and survey of the levels of the canals connected with Seneca lake, and also a plan and estimate of the cost of the necessary improvements."

The report of Mr. Wentz upon such reference, after having been submitted and approved by the State Engineer and Surveyor, was forwarded by the Canal Commissioners with their report to the Legislature. After the receipt of such report, the Legislature passed the act chapter 218 of the Laws of 1848, authorising the Canal Commissioners to continue the Chemung canal from its intersection with Catharine creek by an independent channel northerly to the Seneca lake. It may be well here to remark, that already in 1846 the senator from the 26th (Mr. Guinnip), together with many other citizens of Havana, presented sundry petitions to the Legislature asking for the passage of a law to require the Canal Commissioners to do what this law authorised and directed, the separation of the Chemung canal from Catharine creek, where the navigation enters said creek, between Havana and the head of Seneca lake.

After the passage of such act, the Canal Commissioners referred the matter to C. W. Wentz, the resident engineer, for plans and estimates for the proposed improvements under such law. The report and estimates of such engineer were presented at a meeting of the Canal Commissioners, held at their office in the city of Albany on the

22d July, 1848, and the following is a copy of the minutes of the action of said Commissioners upon such report.

At a meeting of the Canal Commissioners, held at their office in the city of Albany on the 22d July, 1848, present Messrs Cook, Hinds and Beach.

Mr. Cook, the Commissioner in charge, presented the survey, report and estimates of C. W. Wentz, an engineer in the employ of the State, under chap. 218, laws of 1848, in relation to the Chemung canal.

Two lines having been submitted in the report and estimates of the engineer for the location of the proposed new canal, the one "The Eastern or New Harbor Line," extending from the present termination of the Brayton cut, at its junction with Catharine creek, in a northerly direction, a distance of 67 chains to a point near the commencement of the present navigable canal, cut from the inlet to the lake, and from thence curving slightly to the west, and entering the lake about 10 chains east of the present canal. The other making the termination from the direct line before mentioned through the present navigable canal cut at the present Harbor.

And two plans being also submitted in said report for the construction of the proposed canal—the one proposing to excavate the bottom of the canal 37 feet wide, and slopes of banks 2½ feet horizontal, to 1 foot perpendicular, and facing the banks with stone, leaving the bottom, when finished, 26 feet wide, with bank slopes of 3 to 1.

The other, proposing to excavate the bottom 42 feet wide, and slopes 2½ feet horizontal, to 1 foot perpendicular, and giving an extra depth of 2 feet in the bottom, without stone facing; the estimated aggregate cost of which, upon the several plans, is as follows:

	37 feet bottom with stone.	42 feet bottom without stone.
Eastern or New Harbor Line,.....	$45,686 89	$40,001 54
Termination present harbor,......	48,684 78	39,715 68

In adopting a plan for this improvement, the Commissioners find it necessary to make it conform to the directions of the Legislature, as contained in chap. 213, laws of 1844, and chap. 348, laws of 1847. In the former, the Commissioners are directed to reduce the upper or lake level of the Cayuga and Seneca canal, so as to give four feet water in said level; to remove the dam and other obstructions in the outlet of the lake so as to afford a free discharge of the surplus waters of the lake; extending the Lake level to Waterloo, and regulate the discharge of the water at that place; and also to improve the Crooked Lake canal so as to adapt it to use at the natural level of the Seneca lake.

Under the latter law, directing the rebuilding the locks on the Cayuga and Seneca canal, the Commissioners having dispensed with lock No. 1 on the lake level near Geneva, having $1\frac{47}{100}$ feet lift, and deepen that level so as to have at all times four feet water, as directed by the act before recited, makes the upper level of the Cayuga and Seneca canal the standard level to which the levels of the other canals connecting with Seneca lake are to be brought.

To carry out the plan of the engineer in constructing the lower level of the Chemung canal, under the act chapter 218, laws of 1848, giving an extra depth of 2 feet, and increasing the width to 42 feet at bottom, with slopes in the banks of 2½ feet to one foot rise, on account of the soft material through which the line passes, (it being an open marsh,) giving the extra depth and width to dispense with the stone facing, which according to the estimate and report of the engineer is the best plan, and most for the interest of the State; it will make it necessary to deepen the lower level on the Chemung canal from the lake to lock No. 1, near Havana, three feet ten inches there, for in adopting the new harbor line as we now do.

Resolved, That in the location of the line for the proposed new canal, the Canal Commissioners adopt the new harbor line, and that the plan of giving 42 feet width of bottom, with 2 feet extra depth of water in the prism from lock No. 1, at Havana, to the lock, be adopted in its construction without stone facing; and that the bed of Watkins mill creek be so changed and protected as not to come in contact with or injure said canal; and that the Commissioner in charge advertise and put the same under contract according to law.

Under such resolution the canal was put and is now under contract, and the same is being completed in conformity therewith.

After an examination of the ground and a careful investigation by oral testimony of the merits of the case, the undersigned are clearly of opinion that the enlarged size of the extension, both as to the width and depth, was wisely conceived, and is being judiciously carried out. The land, through which the extension of the canal runs, is an open marsh, the soil composed of stratas of muck, clay and sand, and with a canal of the ordinary size and with the usual slope, the effect and action of the water would soon wash away the banks and fill the prism of the canal so as to obstruct navigation, and restore things in as bad condition as they were before the improvement was commenced.

The plan of making the canal of the ordinary size and facing the same with stone owing to the want of consistency in the banks and soil, had in the experiment tried in the Brayton cut, utterly failed to answer the purposes.

The commissioners, therefore, as the undersigned believe, wisely adopted the largest size with the most gradual slope as affording the best assurances of permanency and stability, at the same time that in its original construction it would be the least expensive.

In regard to the extra width of the canal being 42 feet at bottom, giving the banks a slope of 2½ feet to one, and also the extra depth of two feet beyond what would be necessary to float a boat after the requisite reduction of the lake level; this was done to provide for deposites from the wash of the banks and to secure a permanent navigation. The line of the work is over a marsh easily acted on by the water, and the banks will necessarily slide in considerable quantities into the prism. The extra depth and width in the prism will guard against the interruption of navigation from such cause, at the same time that the swell and action of the water upon the banks arising from the passage of boats and lockages will be much diminished by the enlarged capacity of the canal.

It appears from a petition presented to the Legislature in 1846, signed by Senator Guinnip and a large number of inhabitants residing at the head of Seneca lake, both at Jefferson and Havana, that to bring the lake to its natural level would require a reduction of about three feet in the height of the water of the lake. And it also appears by a petition signed by such senator and other citizens of

Jefferson, presented to the Legislature in 1844, that during the season of navigation, there is a fluctuation between high and low water of about three feet. It is necessary for the purposes of navigation, that the canal should be of sufficient depth as well at low as high water; and the least depth which will answer for navigation is four feet. Add together these three sums *three feet* for the unnatural height of the water, *three feet* for the difference between high and low water, and *four feet* the depth necessary for navigation, and it gives 10 feet as the actual necessary depth of the canal to secure navigation at all, without any reference to extra depth to provide for slides.

The undersigned are therefore clearly of opinion that the work is of no greater depth or width than the interests of the State and the security and permanency of navigation required.

The law under which the construction is being made, simply authorises the Canal Commissioners "to continue the Chemung canal from its intersection with Catharine creek by an independent channel northerly to the Seneca lake, west of the mouth of said creek." It makes or contains no provision or restriction in regard to the dimensions of the work, and therefore leaves its size entirely in the discretion and judgment of the Commissioners. Appointed as these Commissioners are for the express purpose of taking charge of, and constructing works of this character in behalf of the State, it was reasonable and wise in the Legislature to leave it to the discretion of their officers so as to enable them to adapt the dimensions of the work to the circumstances and necessities of the case.

The *second* charge made against the Commissioner is, that "the Commissioner has enlarged the Chemung canal from its intersection with Catharine creek to lock No. 1, without any authority of law."

It is presumed that this charge is made on the ground that the law of 1848 applies only to an extension of the canal from the termination of the Brayton cut to the lake. On reference to the reports and estimates furnished to the Legislature prior to the passage of such law, it will be seen that the improvement of the Brayton cut formed an essential part of the work necessary to carry out the intention and object of the Legislature. Without the deepening and improvement of that part of the canal, the extension of the canal would be entirely useless and unnecessary, for after the lowering of the level of the lake as designed to be effected, there would be no navigation whatever between such extension and lock No. 1. The Legislature never can have designed or intended any such absurdity.

The undersigned are therefore clearly of opinion that the Canal Commissioners in making the improvement uniform from lock No. 1 to the lake, have not acted without authority of law, but have only done that which they had full right to do under their general powers, and which was necessary and essential to maintain and keep up navigation on the canal.

The *third* charge is, "that the said Commissioner has, at the public expense, moved a waste wier from lock No. 1 to lock No. 2, on said canal, by which the waste water from said canal is now discharged into the mill pond of his flouring mill, thereby increasing his supply of water without in any way benefitting said canal, and that he has directed the expenditure of public money in docking up a portion of said canal between lock No. 1 and No. 2, and on which portion of said canal said Commissioner owned a mill, two warehouses and a glass factory, and that he has also expended the public money in docking up a basin on which his storehouse stands."

In relation to the first branch of this charge, the removal of a waste wier, the undersigned state that the charge is without foundation. There is now but one waste wier between locks No. 1 and 2, and that is near lock No. 1, where it has always been and was originally constructed. It is supposed that the senator in this charge intended to refer to a waste wier built in the canal between locks No. 2 and 3. There was a waste wier constructed on that level in the latter part of last summer, and from that waste wier there is a ditch cut leading into Catharine's creek, above Mr. Cook's mill, which is fed by the waters of said creek.

It appears from the testimony, that the level between lock No. 2 and No. 3, is short, and that there is on that level a stream of water which discharges itself from the hills into the canal, and a waste weir there is necessary in times of freshets and wet weather, to discharge the surplus water and relieve the locks. There being a high bank on the west side of the canal, the waste weir must, of necessity, be placed in the east bank; and there is no other way of discharging such surplus water, except in Catharine creek.

It appears that the usual mode of constructing waste weirs in that canal, is to fix them with gates in such manner that the water can be drawn through them out of the canal whenever desired. And the superintendent, in preparing the waste weir for that level, framed and constructed it in the usual form, with gates. When he was putting it down, Mr. Cook came there, and observing what he was doing, directed the superintendent not to put in the gates, he would not have them there, because it was above his mill. And the gates were not put in, but the waste weir, under the direction of Mr. Cook, was fixed tight and permanent by planks spiked on and earth thrown against it, so that the water could not leak or be drawn through. And the waste weir is further constructed some inches higher than the top of the lock gates, so that there must be so large a surplus of water in the canal as to run over the top of the lock gates, before any part of it can be discharged over the waste weir.

In relation to so much of said charge as refers to the expenditure of public money, in docking up a portion of the canal between lock No. 1 and 2, the undersigned state, that public money has been expended in docking a portion of the canal between lock No. 1 and 2, (it being the level passing through the village of Havanna,) as well as in other portions of the canal where it passes through other villages.

But the undersigned are satisfied fully, from the testimony taken before them and the actual inspection of that portion of the canal, that the interests of the State, the convenience of those navigating the canal, and the maintenance of navigation required such expenditure. The soil through which the canal on that level passes, is a light, sandy loam, which washes out very much and rapidly by the action of the water. That before the docking was put in, the banks had washed in to that extent, and so filled the prism of the canal with sand, in many places, that two loaded boats could not pass each other; and that frequent detentions were occasioned thereby to boats navigating the canal.

As to so much of said charge as alleges that the said commissioner has expended the public money in docking up a basin on which his store-house stands; the undersigned state, that such charge is also without foundation; that such basin was constructed, excavated and docked about about ten or twelve years ago by the firm of Downer & Co., who then owned such store-house, at their own expense, by the written consent of the Canal Commissioner in charge. Mr. Cook was a member of such firm, and now is the owner of the store-house; and such dock has ever since been maintained at the expense of said owner, the State never having furnished a stick of timber therefor. From the testimony, it further appears, that this basin furnishes the only place on that level, at which boats can be turned round. And thereby is furnished to the public at private expense a convenience which at all other places, shipping any considerable property on the canals is furnished at the expense of the public.

The fourth charge is "That said Commissioner was interested in real estate of large value, adjoining said canal, which was intended to be benefited by the enlargement of the work beyond what was authorised by the law of 1848, and that he was thereby influenced to make a larger expenditure of public money than the law authorised, or than was contemplated by the Legislature in the passage of the aforesaid law of 1848."

In relation to such charge the undersigned suppose that it is fully answered by the facts set forth in relation to the first charge. But they deem it proper in addition to state that the testimony shows that the Commissioner did not at the time of the passage of the act, nor at the time of determining on the size and location of the improvement, nor at the time of putting the same under contract, own any land or property adjacent to such improvement. That the only land the Commissioner now owns, adjoining such improvement, is a farm near the village of Jefferson, which has since fallen into his hands to secure him for endorsements.

The Senator from the 26th having also presented to the Senate a memorial containing certain charges against the said Commissioner, the undersigned have also proceeded in the investigation thereof, supposing them to be included in the reference with the others.

The following is a copy of such memorial:

To the Hon. the Legislature of the State of New-York:

The memorial of the undersigned inhabitants of the county bordering on the Chemung canal, and in other parts of the State respectfully represent.

That, whereas, much inconvenience was experienced by them and by boatmen and others using the said canal during the past season, by reason of the shutting off of the water of the feeder of said canal, at Rhodesport, whereby great obstruction was made to the navigation of the same, the expense and damage of which have been grievous. And, whereas, it has been represented to your memorialists that the said waters, thus shut out of the canal, were used to drive a certain mill, the property of Charles Cook, one of the Canal Commissioners, which said allegation your memorialists believe to be true, and that the said acts are contrary to law. Therefore,

Your memorialists humbly pray your Honorable body to take cognizance on the premises, and to cause enquiry to be made into the facts above stated, and to grant such relief as the case may require. And your memorialists, as in duty bound, will ever pray, &c., &c.

Signed,

Thomas Jackson,
J. O. Seymour,
J. R. Fryer,
H. Whaling,
J. Churchill,
Jas. Murphy,
Josh. Dollern,
H. Sherman,
Eugenius Grover,
James M. Pickle,
C. G. Wilson,
Benoni Peck,
Horace Ogden,
J. H. Chapman,
Ben Chitenden,
Reuben Phillips,
B. Jameson,
Elisha H. Perry,
Orin S. Perry,
Wm. R. Williams,
A. Taylor
J. Anthony,
J. Smith,
Thomas S. Graves,
George Smith,
H. Jennant,
R. Rosebrook,
W. P. Warren,
G. Jennant,
J. D. Paine,
J. W. Ogden,
M. Martin,
P. R. Hamilton,
Grover Whitney,
Albert Vaughn.

The undersigned, for the purpose of investigating the charges contained in such memorial, deemed it the proper course to subpœna before them and examine the memorialists themselves in relation thereto, particularly as in the memorial they complain of detentions which they have themselves experienced. They accordingly did subpœna before them and examine all the memorialists whose attendance they could procure. In the course of such investigation they ascertained that the memorial was drawn by Isaac Q. Leake, upon his own motion, and not at the instance or request of any other person. It was handed by him when drafted to Zophar T. McLuskey, the brother-in-law of Senator Guinnip, who copied and circulated the memorial, and obtained the signatures thereto. Mr. Leake in his examination, stated that he had no personal knowledge of any of the facts alleged in the memorial, and the only information he had on the subject was from Mr. Horace Ogden.

Mr. Mc. Luskey on being examined, also stated that he had no personal knowledge of any of the facts alleged in the memorial; that he never had heard any of the memorialists complain of any of the detentions on the canal except Horace Ogden. He further stated that none of the memorialists were engaged in any business on the canal except J. H. Chapman, Horace Ogden, and John W. Ogden. That William R. Williams owned a boat which was run on the canal by the witness Claugherty, but did not himself run her. He further stated that such memorial was circulated after the commencement of the present session of the Legislature, and after the allegations of fraud were introduced by his brother-in-law in the Senate.

Horace Ogden, the individual referred to by the authors of such memorial, was then examined by the undersigned. He stated in relation to the matters alleged in the memorial, that in the middle or latter part of July last, the gate was shut down in the feeder at Rhodesport, so as to make the water run down the creek; the gate was shut down at night but open in the day time; the first mill below the feeder was a saw mill, not owned by Mr. Cook, and Mr. Cook's mill was situate on such creek at Havanna about three miles below. He further states that he was detained there three days, but that his detention was not occasioned exclusively by reason of the water being shut off at night, but it was owing to a want of water in the Chemung feeder. The reason they could not proceed was that there was a lack of water in the level above, which was not affected by such feeder at Rhodesport which detained them; he saw nothing of Mr. Cook or the superintendent, and he could not tell and did not know by whom the gate in the feeder was closed. The testimony of this witness, upon whose complaint the whole memorial is founded, shows conclusively that there is not any, the least foundation for the charges contained in the memorial against such Commissioner. The other witnesses examined, who have signed such memorial, all testify that they have no knowledge of any of the facts alleged therein, although by their signatures they have vouched for their truth, and thus have placed themselves in the unenviable position of having attached their names to a falsehood for the purpose of defaming the character and credit of an honest man and a public officer of our State.

The superintendent of the canal was examined on this question, and he testified that the gates in the feeder at Rhodesport were under his control; that the water never was shut off in that feeder from the canal, to the detriment of navigation; and the gates were never closed, except to prevent a too great supply of water in the canal. That the directions of the Commissioner in charge were, to keep up navigation; and the witness was never influenced in the closing of the gates by any consideration of benefit or advantage to the mill owners below.

It further appeared, that the mill of the Canal Commissioner was leased out at an annual rent. The mill having been built and put in operation last spring. The lessees of the mill state positively that the water was never diverted from the canal for the supply of the mill, and that they complained to the Canal Commissioner about the lack of water occasioned by such feeder at various times, and insisted upon their right to have such feeder closed. The Canal Commissioner invariably told them that the feeder could not be closed—that navigation must be kept up at all hazards. That, by reason of such refusal and the lack of water, the Canal Commissioner gave up a five years' lease, reserving an annual rent of fifteen hundred dollars, and paid large damages to the lessees, rather than do what the memorial charges him with having done.

The undersigned have thus completed their task, and examined the charges preferred by the Senator from the 26th; and they are highly gratified that the result of such investigation is so highly creditable to the character of the accused Canal Commissioner as a man and a public officer. At the same time that the investigation has exhibited the entire falsity and calumnious character of the charges preferred, it has shown that the public interests are at all times uppermost in the mind of Commissioner Cook, and that he at least does not hesitate to yield and sacrifice his private interests, whenever they conflict with the rights and interests of the public.

M. SCHOONMAKER,
A. S. UPHAM.

(SCHEDULE A.)

Testimony taken by Messrs Schoonmaker and Upham, a majority of the select committee, at Jefferson, under and in pursuance of the resolution of the Senate, of which the following is a copy:

IN SENATE, *March* 14, 1850.

Resolved, That a select committee consisting of Senators Guinnip, Schoonmaker and Upham, be appointed to investigate the charges of alledged frauds on the Chemung canal, preferred by the Senator from the 26th district, against the conduct of the Commissioner in charge, and be authorised to proceed to the village of Jefferson, Chemung county, to investigate the said alledged frauds, and to report to the Senate without delay.

(A copy.) WILLIAM H. BOGART, *Clerk.*

in the investigation of the alledged frauds which are contained in the charges and memorial, of which the following are copies:

The charges to be investigated by the Senate committee appointed to investigate the doings of the acting Canal Commissioner on the Chemung canal, under the act in relation to the Chemung canal, passed April 10, 1848.

"*First*. The said Commissioner has caused the construction of the Chemung canal from its intersection with the Catharine creek to the Seneca lake, to be made and constructed of greater dimensions than authorised by law, and greater than the Chemung canal, as said canal was by law designated and surveyed, thereby increasing the cost of the work beyond what was authorised by the act chap. 218 of the laws of 1848.

"*Second.* That said Commissioner has enlarged the Chemung canal from its intersection with Catharine creek to lock No. 1, without any authority of law.

"*Third.* The said Commissioner has, at the public expense, moved a waste wier from lock No. 1 to lock No. 2 on said canal, by which the waste water from said canal is now discharged into the mill pond of his flouring-mill, thereby increasing his supply of water without in any way benefiting said canal; and that he has directed the expenditure of public money in docking up portion of said canal between lock No. 1 and 2. and on which portion of said canal said Commissioner owned a mill, two ware-houses and a glass factory, and that he has also expended the public money in docking up a basin on which his store-house stands.

"*Fourth.* That said Commissioner was interested in real estate of large value adjoining said canal, which was intended to be benefitted by the enlargement of the work beyond what was authorised by the law of 1848, and that he was thereby influenced to make a larger expenditure of public money than the law authorised, or than was contemplated by the Legislature in the passage of the aforesaid law of 1848.

"*March* 2, 1850.

"Signed, G. B. GUINNIP, *Ch'n.*

"*To the Canal Commissioners*
"*of the State of New-York.*"

To the Hon. the Legislature of the State of New-York:

The memorial of the undersigned inhabitants of the county bordering on the Chemung canal, and in other parts of the State, respectfully represent:

That, whereas, much inconvenience was experienced by them and by boatmen and others using the said canal during the past season, by reason of the shutting off of the water of the feeder of said canal at Rhodesport, whereby great obstruction was made to the navigation of the same, the expense and damage of which have been grevious; and whereas, it has been represented to your memorialists that the said waters thus shut out of the canal were used to drive a certain mill, the property of Charles Cook, one of the Canal Commissioners, which said allegation your memorialists believe to be true, and that the said acts are contrary to law; Therefore,

Your memorialists humbly pray your honorable body to take cognizance on the premises, and to cause inquiry to be made into the facts above stated, and to grant such relief as the case may require. And your memorialists, as in duty bound, will ever pray, &c., &c.

Signed,

Thomas Jackson,
J. O. Seymour,
J. R. Fryer,
H. Whaling,
J. Churchill,
Jas. Murphy,
Josh. Dollern,
H. Sherman,
Eugenius Grover,
James M. Pickle,
C. G. Wilson,
Benoni Peck,
Horace Ogden,
J. H. Chapman,
Ben. Chitenden,
Reuben Phillips,
B. Jameson,
Elisha H. Perry,
Orin S. Perry,
Wm. R. Williams,
A. Taylor,
J. Anthony,
J. Smith,
Thomas S. Graves,
George Smith,
H. Jennant,
R. Rosebrook,
W. P. Warren,
G. Jemant,
J. D. Paine,
J. W. Ogden,
M. Martin,
P. R. Hamilton,
Grover Whitney,
Albert Vaughan.

Zophar T. McLuskey. I reside in Jefferson, Chemung county; have resided there permanently for six years last past; am a painter by trade; now under-sheriff of Chemung county; aged forty-seven years. Know Charles Cook, acting Canal Commissioner; believe there is a feeder to the Chemung canal at Rhodesport. The stream with which the feeder connects is a part of Catharine creek; I was along there during the last season; know nothing personally about the shutting off the water of the feeder from the canal during last season.

On being shown the memorial of the inhabitants of Chemung county, bordering on the canal, and being asked whether there were any facts contained in such memorial of which he had any personal knowledge, stated, that there was not; there was something connected with the water and not stated in the memorial, which might be embraced in it—that is in regard to the waste-wier from the canal to the millpond. I happened along there this last season, and found they were about completing a ditch from the canal, above lock No. 2 to the creek, above the pond; no water was yet running in it; there was no water in that level of the canal; it was all new and fresh; this was in the boating season, and it is my impression it was the latter part of the boating season. I have passed it since that time and saw no difference except that it showed the wear of water some. When I first observed it there was a waste frame put in; there were some men to work on the opposite side of the canal, at the old waste-wier. Have never examined the waste-wier particularly since. The old waste-wier was on the west side of the canal, around lock No. 2; and that waste-wier is there still. Have never been along there since; the waste-wier was there; that the water was in the canal. Know nothing about the height of the new waste-wier as compared with the old one; know nothing about the height of the new waste-wier as compared with the height of lock-gates; do not know whether or not there is any gate in the waste-weir.

Z. T. McLUSKEY.

Sworn and examined before us,
this 29th day of March, 1850.

M. Schoonmaker,
A. S. Upham.

James H. Chapman.—I live in Jefferson, Chemung county; have resided there four years last past; am a merchant, aged twenty-six years. On being shown a copy of the memorial of certain citizens of Chemung county, living on the borders of the Chemung canal, signed by Thomas Jackson, J. H. Chapman, and others, states, I think I did sign a memorial of that character, but have no personal knowledge of any of the facts contained in it.

J. H. CHAPMAN.

Sworn and examined before us, this
29th day of March, 1850.

M. Schoonmaker,
A. S. Upham.

Mr. Chapman being recalled, states, that of the persons whose names are on that memorial, I am not acquainted with Thomas Jackson, J. Churchill, James Murphy, Joseph Dollern, C. G. Wilson, J. Smith, R. Rosebrook, Albert Vaughan, and Thomas S. Graves. I have been a merchant and clerk in this place, for four years last past. The others I am acquainted with, and they all reside in Jefferson, except George Smith, and Reuben Philips. Of those residing in Jefferson, J. O Seymour, and J. R. Fryer, are absent, one at New-York and the other left for Dundee this morning sick. I think that Mr. Z. T. McLuskey presented the memorial to me for my signature. Smith and Phillips reside about 2 or 3 miles from here.

J. H. CHAPMAN.

Sworn and examined before us this }
29th day of March, 1850. }

M. SCHOONMAKER,
A. S. UPHAM.

Horace Ogden.—I live in Jefferson, Chemung county; have resided there about twelve years last past; have been boating the last few years; am a harness maker by trade, and am upwards of forty years of age.

On being shown the copy of the memorial referred to in testimony of previous witnesses, says: I signed such a memorial; I think that Mr. McLuskey presented it to me, but am not sure he spoke to me about it. On being asked what facts contained therein he knew, stated, that about the middle or last part of July, the water was shut off from the canal. The gate was shut down in the feeder at Rhodesport, so as to make the water run down the creek. We were there two or three days; the gate was shut down nights, and in the morning boatmen would go and raise it again, so as to let the water in the canal I do not know who shut down the gate; I did not see any body do it; saw Dewitt Smith go in the morning, as he said, to raise the gates. The first mill on the creek below the feeder, is a saw mill, not owned by Mr. Charles Cook that I know of, but I do not know who owns it. I believe there is no other mill below that feeder, than the saw mill, until you come to Mr. Cook's mill. Mr. Cook's mill is situate at Havana; that is about three miles below this feeder; I do not know that it was shut off at any other time; I never was along there at any other time that there was any detention; at that time we were detained there those three days by the want of water. I saw a notice on the gate, for boatman not to meddle with it. I did not know the handwriting in which the notice was; I did not see anything of Mr. Cook, the Canal Commissioner, there at that time; I do not know whether he was home at that time or not. Caleb Allen was the superintendent of the canal; I do not recollect that I saw him during my detention at that place; saw him on the line of the canal during that trip, but not there; we were on our way up; after we got away from there, we saw him;

think I did not say anything to him about our detention. Our detention there was not exclusively occasioned by reason of the water being shut off at night; it was owing to a want of water in the Chemung feeder. This feeder comes in between locks No. 9 and 10; that level is about forty rods or less, in length. The feeder is nearer lock No. 10, than lock No. 9; we lay in lock No. 9, a short time one day, then shoved out, and lay near the middle of the level, the rest of the time; we would be aground in the morning, but not in the day time; the reason we did not proceed up when we were not aground was, that there was a lack of water on the level above; the level above was not affected by this feeder; and there was a lack of water along the whole line of the canal; when there was enough water on that level for us to move up, we were prevented from going up, by the lack of water above. There was a boat heavily laden, which lay in lock No. 10, and could not get out for the want of water in the level above; even if the gates in the feeder had not been closed at night, we could not have got out of the level. The cause of our detention, was that we could not be locked through by reason of low water above lock No. 10; there was a boat in almost every lock above; when we got up at the summit, we found the State hands at work there, but did not see any below; at this time, the entire navigation of the Chemung canal, above lock No. 10, was interrupted in consequence of want of water in the Chemung feeder.

HORACE OGDEN.

Sworn and examined before us, this 29th day of March, 1850.

M. Schoonmaker,
A. S. Upham.

Benoni Peck, being duly sworn, says: I live in Jefferson, Chemung county; have lived there between 19 and 20 years; am a tailor by trade; forty-four years of age. On being shown said memorial, says, I signed a memorial of that description; think Mr. McLusky presented it to me for my signature, but am not positive. I have no knowledge personally of any of the facts set forth in such memorial.

BENONI PECK.

Sworn and examined before us, this 29th day of March, 1850.

M. Schoonmaker,
A. S. Upham.

Jonah D. Paine, being duly sworn and examined, says: I live in Jefferson, Chemung county; have resided there about two years; am somewhat over 19 years of age; am a clerk in the store of T. H. Abby & Co. On being shown said memorial, says, I signed a paper of that description; think Mr. McLusky presented it to me for my signature; know nothing personally in relation to any of the facts stated in the memorial; know a man by the name of Rosebrook; he kept a grocery here, and has left town; I do not know where he has gone; I know none of the other persons mentioned in Mr. Chapman's testimony, as unknown by him.

J. D. PAINE.

Sowrn and examined before us, this
29th day of March, 1850.

M. SCHOONMAKER,
A. S. UPHAM.

Colin G. Wilson, being duly sworn, says: I live in Jefferson, Chemung county; have resided there four months; previous to that time resided in the city of Rochester; am aged 35 years. On being shown copy of said memorial, says, it is a copy of the one I signed, I believe; I know but very little of the facts alleged; my knowledge is entirely from hearsay; I have no personal knowledge whatever of it; I am not positive, but think it was Mr. McLusky who presented the paper to me for my signature.

COLIN G. WILSON.

Sworn and examined before us,
this 29th March, 1850.

M. SCHOONMAKER,
A. S. UPHAM.

Isaac Q. Leake, being duly sworn says: I live in the town of Redding, Steuben county; it is within the corporate bounds of the village of Jefferson; I have lived there since the year 1828; am 67 years of age; I do nothing at present; I have been at various occupations; once a merchant, then cashier of a bank, afterwards State printer. On being shewn said copy of memorial, says, I never saw the one presented to the Senate, but have no doubt I furnished the original draft for the one which was presented. I rather think it was drawn on my own motion; I doubt whether it was at the instance or request of any body; I presume I had conversations with individuals who made the complaints; I cannot say who those individuals were; I think I heard Mr. Horace Ogden complain, he was the only one I heard complain who was conversant with the facts, and he said that the complaint was not confined to him. I handed the draft to Mr. McLusky, if I am not mistaken; I think I did. I have not any personal knowledge of any of the matters alleged in the memorial. Mr. Ogden's complaints were during the navigation; I do not recollect hearing him complain more than once, although I think it is quite probable I did. Horace Ogden is the only person whose name is on the memorial, who has any particular knowledge of the facts to my knowledge; no other person not on the memorial which I can advise to be subpœnaed, except Mr. Robert Mills, the lessee, and the miller at Cook's mills.

I was not present at the meeting of the citizens of Jefferson in relation to the Chemung canal; I was appointed on a committee by the meeting, but was not present; this meeting was previous to the 21st of December, 1848; the proceedings were never published; I drew up the memorial as a member of that committee; it was presented at an adjourned meeting, approved and ordered to be printed. I was present at the second meeting, presented the memorial, and read it; Robert Mills was chairman, and Enoch Armisted secretary of the meeting; Edward Quinn and E. W. Jervis were my associates on the committee; they did not aid me in drawing up the memorial; I think I did not submit it to the others before I presented it to the meeting; that meeting was held in the bar room of the Jefferson House; the meeting was a very thin one; the room in which it was held is about twenty feet square; the room was not full; cannot say how many were in attendance; there might have been 15 or 20 persons in attendance; am not sure but there were more, or that there were so many; those attending the second meeting resided in the village of Jefferson; the second meeting was held subsequent to the 26th December, 1848, and I think about the time of the commencement of the session of the Legislature in 1848.

The part of the Chemung canal between its intersection with Catharine creek and Lock No. 1, is called the Brayton cut; the Brayton cut was before the enlargement 26 feet wide at the bottom.

As to the third and fourth charges, I have no personal knowledge in relation to them. I asked Senator Guinnip upon what authority he made those charges, and he told witness that Caleb Allen, the superintendent of the canal last year, had told him that he had docked up the basin of Mr. Cook and the canal opposite at the public expense, or words to that import. He, Mr. Allen, had been canal superintendent two years; his term expired last winter, as I have been informed. I do not know that before July, 1848, Commissioner Cook owned any property north of Lock No. 1, and between Lock No. 1 and the lake; he has, I am informed, become interested in some lands north of Lock No. 1, and between it and Seneca Lake very recently.

On being asked whether there are any other matters which he knows, or can state, in relation to the matters contained in the several charges, stated that there is a discrepancy between the map shown to him, as submitted by the Canal Commissioners, and the phraseology of Mr. Wentz's report, of February, 1848.

The Commissioner in charge has gone on, and is completing the work on the Chemung canal, in the manner specified in the resolution of the Canal Commissioners, of the 22d day of July, 1848, so far as I understand them.

Will you now state whatever other facts are within your knowledge material for us to inquire into in investigating the charges preferred against the Canal Commissioners, a copy of which are now shown you?

I know of no other facts; in the construction of the Cayuga and Seneca canal the Canal Commissioners assumed a false level for the water level of the lake, which in its operation raised the water of the lake above its proper level. The water now is about two feet or two feet and a half higher than it was last October. The rise of the water level of the lake has fluctuated at different times. This rise of the water level was occasioned by placing obstructions in the outlet of the lake, and has occasioned great inconvenience here, and to the inhabitants above this. I do not know what was the depth of water in the Brayton cut. The inhabitants of this vicinity have for many years petitioned the Legislature to reduce the water level of the lake so as to prevent the overflow of their lands, and also urged the Canal Commissioners to carry out laws passed for that object,

J. Q. LEAKE.

Sworn and examined before us,
this 29th day of March, 1850,

M. Schoonmaker,
A. S. Upham.

Edward Quin, being sworn and examined, says: I was a member of a committee appointed to draw up a memorial in relation to the Chemung canal. Mr. Leake and another person were my associates. I think I attended the meeting at which the committee were appointed; that meeting was held in the village, but am not certain whether it was at one of the hotels or not; cannot say who were the officers of the meeting; recollect the occasion, but do not recollect any of the particulars; I conferred with Mr. Leake in relation to the memorial and such data as we had access to. The labor was chiefly performed by Mr. Leake. Mr. Leake left the memorial with me before it was presented. I think and am confident I did attend the meeting at which the memorial was presented.

On being shewn a copy of the charges preferred, and asked, what facts, if any, do you know in relation to such charges, or any of them? stated:

I cannot of my personal knowledge say anything.

In relation to the fourth charge, says:

I have been informed that before July, 1848, Commissioner Cook held a contract for the purchase of some land in the south bounds of the village of Jefferson, which had been assigned to him by Mr. Alvin Nash as collateral security for some indebtedness on endorsements; last season and quite recently he (Mr. Cook) has, I am informed, purchased some land from Dr. Bailey and Mr. Watkins.

On being shown the memorial referred to in testimony of previous witnesses, signed by J. H. Chapman and others, says:

I have no personal knowledge in relation to any of the matters contained in it. The reason why my memory is so unserviceable is that I had previous to the meeting ceased to give it as much attention as I had done theretofore.

E. QUIN.

Sworn and examined before us, }
this 29th day of March, 1850, }

M. Schoonmaker,
A. S. Upham.

John W. Ogden, being duly sworn, says: I live in Jefferson; have lived there since 1836; am 18 years of age, and am a laborer.

On being shewn a copy of the memorial signed by J. H. Chapman and others, said:

I recollect signing such a paper as that. All I know about the facts are, that I was up with my father, Horace Ogden, when I was detained on the canal by low water; I remained there with him one day. I am not sure, but it was either McLusky or Armitage presented papers to me for signature.

JOHN W. OGDEN.

Sworn and examined before us,
this 29th day of March, 1850,

M. SCHOONMAKER,
A. S. UPHAM.

Byron Jamison, being duly sworn, says, I live in Jefferson, Chemung county; have lived there about 4 months; am a clerk in Chapman & Seymour's store; came from Redding, in Steuben county, when I moved there; am 19 years of age. On being shown a copy of memorial signed by Chapman and others, says: I recollect signing such a paper, but know nothing about the facts contained in it; it was presented to me by Mr. McLusky.

BYRON JAMISON.

Sworn to and examined before us,
this 29th day of March, 1850.

M. SCHOONMAKER,
A. S. UPHAM.

Benjamin C. Osborn, being sworn says, I reside in the town of Hector, Tompkins county, and have resided there nearly twelve years; am a merchant and a purchaser of produce; am aged 37 years; was one of the lessees of Mr. Cook's mill in 1849; it was leased by witness and Elijah Baker under firm of E. Baker & Co.; it was a new mill then, and had never been occupied; we took a lease for three years at $1,500 a year rent; it is the new mill at Havana, the pond fed by Catharine creek. This is the only mill that he owns or has owned that I know on that stream; took possession of it near the 1st of May, 1849, and left it in July, 1849, principally because of the want of water; there is a dam in the creek near Rhodesport, with a feeder thereout running into the canal; there was a temporary gate in that feeder when I saw it; I do not know of the gate in that feeder ever being closed so as to prevent the water running into the canal. While I had the mill, the water was never diverted from the canal for the supply of the mill; I frequently spoke to Mr. Cook, both publicly and privately, and urged and insisted as our right that the water of the creek should not be diverted into the canal, and threatened to tear out the dam and close up the cut, on the ground that the State had no right to the water, but we were entitled to it at the dam. Mr. Cook invariably refused to permit it, and said that the water must be diverted as long as it was needed for navigation; that navigation must be kept up without regard to consequences. We claimed damages of Mr. Cook on account of the want of supply of water, upon giving up the lease, and he paid it to us, and charged us nothing for the rent of the mill while we occupied it; there is not to my knowledge, any truth in the allegation in the memorial as to the diversion of the water, by Mr. Cook, from the canal; there was no waste-wier between lock No. 2 and No. 3, when we were there; there has one been built, as I have seen, since; I did not notice its construction particularly.

BENJ. C. OSBORN.

Sworn and examined before us, }
this 29th day of March, 1850. }

M. Schoonmaker,
A. S. Upham.

Robert V. Shirly : I live in Jefferson, Chemung county ; I have resided there since February 1849 ; am a printer, and the publisher and proprietor of the paper called the American Standard, the only newspaper published in this village. Isaac Q. Leake is the editor of the paper. On being shown a copy of the charges preferred, and being asked to state all he knew in relation to the matter of facts contained therein or material in the investigation of such charges, answers, I do not know that I can advance any thing that will do any good ; I know nothing personally, nothing but hearsay. On being shown the copy of the memorial signed by J. H. Chapman and others, and asked to state all he knew in relation to the matters set forth in said memorial or material in the investigation thereof, says, I know nothing personal in relation to that: have heard several complaints from citizens; from Horace Ogden; I cannot mention the names of others, as I took no notice of it particularly.

Abraham Taylor: I live in the village of Jefferson; am engaged in no particular business; have lived there since the fall of 1839; I do not recollect signing any such paper as the memorial signed by I. H. Chapman and others shown to me; I have no business on the canal, and know nothing about any of the charges or matters specified therein.
A. TAYLOR.

Sworn and examined before us, this
29th day of March 1850.

M. SCHOONMAKER,
A. S. UPHAM.

William A. Chrisler: I live in Pine valley, Chemung county; have been there twenty years; am aged thirty-six years; am a boatman and have followed the water since my residence there; I am a captain of a boat on the lake line on the Chemung canal; I have always found difficulty in the navigation at low water in the lake, and compelled to lighten the boats before getting through. For the last three or four or five years, a lighter has been kept by the state to lighten boats so that they could pass through the canal in the lake level to the lake. There is from two to three feet difference between high and low water in the lake; last season in one trip I lay five days with my boat only partly laden, and could not get up the canal on account of the bars formed in the lake level. After we got up to the lock, we found an abundance of water in the canal above; I have been troubled very often in passing boats in the Brayton cut; the soil is of a very loose alluvial character, and kept caving in so as to prevent easy navigation; I have found difficulty in going through there when only a small load on. There was a dam thrown across the creek to throw the water out of the creek into the canal on the lake level.

In relation to the level between lock No. 1 and 2, that is the level which passes through the village of Havana, and is docked up, most of it has been docked since Mr. Cook was commissioner. Before that was done we were very much troubled in getting through that level; the boats would get wedged up. The soil is of a sandy, light character, and washed into the canal before it was docked, so as to impede the navigation of the canal, and render it necessary to be cleaned out. This docking prevents the sand washing into the canal and filling it up, and in witness' opinion it was a necessary expenditure for such purpose, and to preserve the navigation of the canal.

There is no waste-wier between lock No. 1 and No. 2 on the canal at all, but there is one between lock No. 2 and 3. That waste-wier is so high that witness has seen the water so high that it run over the top of the gates in Lock No. 2, and did not run over the waste-wier.

It has always been the custom to build waste-wiers on the different levels an inch or so higher than the gates, for the purpose of discharging the surplus water running down into the canal from the mountains. At that level the canal is at the foot of a high bluff, or hill.

As to the feeder at Rhodesport, I have never known the gates in that feeder to be closed so as to shut off the water from the canal when there was a scarcity of water, but have known it to be done by the lock-tender when there was too much water in the canal for navigation.

Witness was navigating the canal constantly during the season of 1849; sometimes was delayed a little in loading.

WM. A. CHRISLER.

Sworn and examined before us, }
this 29th day of March, 1850. }

M. Schoonmaker,
A. S. Upham.

Alexander Clauharty. I live at Havana; I have lived there and in the vicinity about 26 or 27 years; am a boatman, and the captain of a boat; have followed boating more or less for the last twenty years. I heard the testimony of the last witness, and agree with that testimony fully, and more too.

Previous to the Brayton cut being dug, there was always difficulty in getting down, owing to bars being made by quicksands. The lower bar was considered the worst; it was called the Buttonwood bar; on arriving there, up or down, with a full cargo, if we could not get teams enough on the boats to draw them over, we, (the boatmen) did several times construct dams. The boats bound up, we would get them as near to the bar as they could be got, and as close together, put one or more sticks of timber across from bank to bank, below the boats, secure them at the ends permanently, and drive boards or planks on the upper side, so as to form a dam. In that way we could dam the water sufficiently that the boats bound up could pass the bars, and those bound down and were ready to move, could move down and take the places of those that were bound up; and then the dam would be torn away. That was the way we had to pass up and down until the Brayton cut was made, which avoided those bars. At that time there were no lighters. Since the Brayton cut was completed we had very good navigation in the Brayton cut until the past season, when it appeared to have filled up by banks sliding in and bottoms raising up. I think it must have been filling in more or less from the time it was built until the present time; the inlet appears to have been filling up more or less every year; where it was formerly 15 or 20 feet deep it will now scarcely float a loaded boat.

Previous to the Brayton cut being made, and before there was a tow path, or any part of it, we would have to push up and down with poles; a long pole on one side and a short one on the other. The obstructions in the inlet below the Brayton cut have, for the last few years, been very extensive; bars would form, and have to be removed by mud diggers and other means of under-water excavations. The boatmen have lost a great deal of money from detention of that kind in that inlet; from detentions, expenses of draining, and lighting boats. The State has of late years been obliged to keep lighters there, and an under-water excavator to keep up any kind of navigation.

As to the Havana level, between Lock No. 1 and No. 2. The basin of Mr. Cook on that level, was docked by himself, at his own expense, before he was Canal Commissioner, and that is the only place on that level on which a boat can turn round. I think the balance was principally docked after he was Canal Commissioner. And I think it was necessary that it should be. A part of that level was docked before Mr. Cook was Canal Commissioner, and under Mr. Hudson, as Canal Commissioner in charge. I think that the docking done by Mr. Cook, as Canal Commissioner on that level, was necessary, because the nature of the soil between Lock No. 1 and No. 2, is such that the swell washes the banks, settles towards the middle of the canal, and fills it up. The soil is of a light, sandy character, partakes of the nature of a quicksand. There is also a large amount of shipping done there, and frequently boats loading on both sides of the canal at the same place, and it left the canal too narrow for a boat to pass between them, and thus much detention was occasioned. And the banks washing in and filling up the canal, the swell occasioned by locking boats through would create such a swell as to throw boats laying loading, up the bank, and ground them so as to require the strength of several men to pry them off. There is a heavy amount of lumber shipped there every year, as well as merchandize left there.

Witness himself lost last season one hundred dollars at least by the detentions occasioned on the canal to his own boat.

If the level of the lake is lowered to its original height, the canal which is now constructing, is not deeper than is necessary to secure good navigation at all seasons of the year.

Judging from the character of the soil, which is a marsh, and a mixture of clay and quicksand, with strata of muck; and also the manner in which bars were found in the old wier and canal, I do not think the canal is any larger than is necessary to secure permanent navigation. With the Brayton cut we at first did very well, but last year it filled up so, that we could not get through, without difficulty. If a cut of the size of the Brayton cut, had been continued through to the lake, it would have been of very little use, as it would in all probability have needed excavation every year or so. Witness forms this judgment from the present appearance of the Brayton cut, after the water is out of it.

Witness was on the canal in July, 1849, during the detention on the canal in that month. That detention was created by the want of prompt attention by the superintendent, in not removing grass in the main Chemung feeder above the summit.

On being shown the copy memorial, signed by J. H. Chapman and others, he states that the only name he recognises on such memorial of a person engaged as a boatman, or engaged in forwarding or other business on the Chemung canal, is Horace Ogden, who is a boatman.

ALEX'R CLAUHARTY.

Sworn and subscribed before us, this
29th day of March, 1850.

M. SCHOONMAKER,
A. S. UPHAM.

Zophar T McLusky, on being recalled, says: I was the individual who procured signatures to the memorial signed by J. H. Chapman and others. Am not engaged in any business on the Chemung canal; I was not last season; I had not experienced any inconvenience in relation to the want of water in the canal; I am not certain, but it is rather my impression E. Q. Leake suggested the getting up of the memorial. He is not engaged in any business on the canal that I know of. On being shown the memorial signed by J. H. Chapman and others, and being asked which of the individuals whose names are on that memorial, were last year engaged in any business on the canal as boatmen or forwarders, said: I think that Chapman was connected with the navigation in running lumber from the Chemung run to this place; William R. Williams owned a boat run by Mr. Claugharty; (the last witness) but did not himself run one; also Horace Ogden and John W. Ogden were engaged in boating. That is all; I think there was no other person besides Mr. Leake, suggested getting up the memorial; I copied the memorial after it was drafted by Mr. Leake. At the time I got the individuals to sign the memorial, they did not make any complaint of having sustained any inconvenience by detentions on the canal. Have not, at any time, heard any one of the individuals signing the memorial, except Horace Ogden, complain of having experienced any inconvenience from detentions on the canal.

This memorial was circulated after the commencement of the present session of the Legislature: it was after the allegations of fraud were introduced in the Senate. Witness is a brother-in-law of Senator Guinnip: they married sisters. The memorial was got up and forwarded to Senator Guinnip without any consultation with him, and it was requested to be forwarded to the other House. John W. Ogden is a minor, but I believe he has a separate interest in his father's boat.

Z. T. McLUSKEY.

Sworn and examined before us, this }
29th day of March, 1850. }

M. Schoonmaker,
A. S. Upham.

George Lane.—I reside at Millport; am a captain of a boat on the Chemung canal; have been engaged boating on the canal fourteen years and upwards; most of the time had charge of two boats. I heard the testimony of Mr. Clauharty; and agree with him fully in his statements and testimony, except that the loss to boatmen by detention, &c., is estimated at too low a rate. And further adds, that a large amount of property has been lost on the lake lines by being thrown off the boats to lighten them. Witness has seen sixty or seventy boats lying aground and detained thereby, at one time, in the lake level.

GEORGE LANE.

Sworn and examined before us, this
29th day of March, 1850.
M. SCHOONMAKER,
A. S. UPHAM.

George Lane further testified that—I know of a great deal of lumber that went down the Chemung and Susquehanna rivers, on account of the bad navigation here, which otherwise would have come this way.

GEORGE LANE.

Sworn and examined before us, this
29th March, 1850.
A. S. UPHAM,
M. SCHOONMAKER.

Julius H. Gilbert, being sworn, says:—I reside at Gibson, Steuben county. Boated on the Chemung canal, last season, as the owner and captain of a boat. I heard the testimony of Horace Ogden. I was detained on the canal at the same time spoken of by Mr. Ogden. Was not on the same level, but was in the same company. The detention was caused by the lack of water coming through the Chemung feeder, but was not caused by the water being shut off in the feeder at Rhodesport. Last season I experienced considerable inconvenience from the lack of water on the lake level. I lay there at one time three days with his boat and could not get through. I never sustained any detention or inconvenience at Rhodesport by reason of water being shut off from the canal in the feeder on that level, and never knew of the water being shut off there at all.

I fully agree with the witness Clauharty in his statement and opinion in relation to docking in the level between locks No. 1 and No. 2, and also in relation to the propriety and necessity of a canal of the size at which it is being made on the lake level.

JULIUS H. GILBERT.

Sworn and examined before us, this
29th day of March, 1850.
M. SCHOONMAKER,
A. S. UPHAM.

Oliver Rouse.—I reside at Gibson, Steuben county; was a boatman on the Chemung canal in the year 1847, and was detained at one time in that year, three or four days on the bars in the lake level. In the month of December, of the same year, I came down the canal at the time of a freshet, and by reason of the waters in the inlet, coming down with great force, which was then used as a part of the canal, it was with great difficulty that they could land and unload their boats without being forced into the lake.

I fully agree with the witness, Mr. Claugherty, in his statement and opinion in relation to the propriety and necessity of the docking in the Havana level, between locks No. 1, and No. 2, and also in relation to the propriety and necessity of a canal of the size at which it is being made in the lake level.

OLIVER ROUSE.

Sworn and examined before us this
29th day of March, 1850.
M. SCHOONMAKER,
A. S. UPHAM.

Ira B. Latten.—I reside at Millport, in Chemung county; am captain of a boat, and have been boating on the Chemung canal principal part of the time during the seasons of navigation for 16 or 18 years. I heard the testimony given by Mr. Claugherty, and I agree with that witness in all his statements, except that I sustained inconvenience and difficulty in the navigation of the Brayton cut as early as two years ago last summer, and during that year also; owing to the difficulty in the navigation, we were compelled to go all the way round, and up the old inlet.

IRA B. LATTEN.

Sworn and examined before us this
29th day of March, 1850.
M. SCHOONMAKER,
A. S. UPHAM.

Robert Mills: I live in Jefferson; occupied Mr. Cook's mill, at Havana, last season; took possession of it when Baker & Osborn left it, about the 20th of July. I leased the mill of Mr. Cook; I knew of the feeder at Rhodesport, cutting the water off from the creek and leading it into the canal; I do not know of the water at any time being shut off in that feeder from the canal to benefit Mr. Cook's mill. I frequently spoke to Mr. Cook on the subject when there was a scarcity of water, and wanted to know of him whether the water could not be left to run into the creek, so as to give them water for the mill, and not take it into the canal, and his reply always was that it could not; he never gave me any permission whatever to shut it off. I knew of the waste wier between locks 2 and 3; I never have seen any water run through the waste wier; I have examined it sometimes twice a day for the purpose of seeing whether any water escaped through the waste wier or not; It cannot run through them unless there is a great deal of water in the canal; I have been up when the water would be running over the tops of the gates of the locks a couple of inches, and it would not be running over the waste wier.

ROBERT MILLS.

Sworn and examined before us, this
29th day of March, 1850.

M. Schoonmaker,
A. S. Upham.

Ransom H. Guinnip : I reside in Jefferson, Chemung county ; have resided there between six and seven years; am not now engaged in any particular business; am a son of Senator Guinnip; am aged 30 years. On being shown the copy of memorial signed by J. H. Chapman and others, says, I never saw the original of that memorial, nor any copy of it before to-day ; I have no knowledge of any of the facts set forth in the memorial; have heard all those charges made of taking the water from the canal at Mr. Cook's mill, and shutting it off from the canal at Rhodesport; have heard Mr. Horace Ogden make those charges, but cannot give the name of any other person; heard persons make such representations, but did not know who they were. On being shown the charges preferred, says, that I know of the docking between locks No. 1 and No. 2; the whole of that cut is docked; there is no glass factory at Havana; Mr. Cook has put up a building, said to be intended for a glass factory, but was never used for a glass factory. Last fall, I understand, he sold it to the railroad company. Some years ago witness lived at Havana, and then a part of Mr. Cook's basin at Havana, in the canal, was docked ; it might have been docked all round, but think not. I do not know any thing about his docking basin at public expense.

Mr. Cook's mill stands within 15 feet of the canal on that level, and there is docking now in front of that mill in the canal where there was none seven years ago; cannot tell whether it was put there for the benefit of Mr. Cook's mill; cannot tell whether it was docked there before or after the mill was built; it is a benefit to the mill to be docked in front of it; boats can load and discharge more conveniently by the dock; never heard of any inconvenience in navigating in canal there when there was water enough; witness does not know of any person whose attendance can be procured by the committee to sustain the charges.

In relation to the 4th charge, I understand Mr. Cook had an assignment of a contract of 150 or 175 acres of land, which the new canal runs through, as collateral security for an indebtedness or endorsement. The contract was forfeited to him, and he became the owner of the property. I believe the contract was forfeited to him over a year ago; I think a year ago last November I heard Mr. Burnet say that Mr. Cook had the contract of the Nash farm, and it had been forfeited to Mr. Cook. There is no other property north of lock No. 1 that Mr. Cook owned or was interested in to witness' knowledge at that time; cannot tell whether or not Mr. Cook was influenced to make a larger expenditure of money than authorized by law, to benefit his own property. He has during last fall bought other property north of the lock No. 1.

Do you of your own knowledge know that any of the charges against Mr. Cook for malfeasance in office and improperly expending the public money, are true?

I do not know what the law is, and I do not know therefore but what he has expended all the money according to law; I do not know of my own knowledge that they are true. Senator Guinnip did own some land through which this enlarged canal passes; he purchased the land about 4 or 5 years ago; ten acres; it lies east of the present canal bridge, the lake level of the new canal running through it; he paid 15 dollars an acre for it; he sold from 8½ to 9 acres of that land about last August or September for $4,000, to Mr. Bradley; Mr. Bradley said he bought it on speculation, thinking the railroad depot would be made there. The other part of the land he had previously sold for 6 or 700 dollars.

R. H. GUINNIP.

Sworn and subscribed before us, }
this 29th day of March, 1850. }

M. Schoonmaker,
A. S. Upham.

William Skellinger: I was a joint owner with Cook and Downer in the lands on the canal at Havana, where the Cook dam was made, at the time it was made. The firm of Downer & Co., composed of Charles Cook, E. H. Downer & witness; got permission from the Canal Commissioner in charge at that time, or the Canal Board, about 10 or 12 years ago, to make a basin; the basin was then made, excavated and docked by said company at their own expense, all round, and continued the dock from the basin along the store to the bridge, being about 45 or 50 feet. That docking has been kept up there ever since. When Mr Hackney was superintendent, as much as from 5 to 7 years ago, he put up docking on the other side of the canal; witness resided at Havana at the building of the canal, and was there at one time in 1833, when the canal was run nearly full in places with sand from the hill, caused by a heavy rain; the banks used to wash a great deal into the canal, and required considerable work to clear it out; thinks that docking was necessary then to keep up good navigation, and it could be kept up cheaper in that way than any other. WM. SKELLINGER.

Sworn and examined before us }
this 29th day of March, 1850. }
M. SCHOONMAKER,
A. S. UPHAM.

E. Crandal: Lives at Millport; am engaged in farming and lumbering business; have had boats running on the canal for two years last past; his boats have been detained on the lake level by the navigation; knows something of the feeder at Rhodesport; does not know of water at Rhodesport being shut off from the canal; knows that the water was low in the canal in July last.

In the creek the water above the feeder at Rhodesport in low water is at night shut back by the millponds above, so that there would be but little if any water coming down the creek to feed the canal at night. Through the lake level from lock No. 1 to lake, navigation on a canal of ordinary size could not be kept up without great inconvenience and expense, owing to the nature and character of the soil through which it passes. The new canal being made is not larger than is necessary to keep up navigation.

There are 17 mills and mill-ponds in Catharine creek, above the feeder at Rhodesport, and below the summit. The usual custom is to use the water by day and shut down the gates at night; and in low water does not think that at night there would any escape; below the dams it would all be used in filling the dams.

E. CRANDAL.

Sworn and examined before us,
this 29th day of March, 1850.

M. Schoonmaker,
A. S. Upham.

Elijah F. Vanderhoff. Resides at Millpond; am a boatman on Chemung canal; in summer season am captain of a boat; have been a boatman on the canal for the last 13 years. Witness has heard the testimony of Mr. Clauharty, and agrees with him in his statements, except that he, the witness, found much inconvenience by shallow water in navigating through the Brayton cut already in 1848, as well as in 1849.

E. F VANDERHOFF.

Sworn and examined before us,
this 29th day of March, 1850.

M. Schoonmaker,
A. S Upham.

Erastus Crandal, being recalled, says that on the level between lock No. 1 and lock No. 2, owing to the character of the soil, its light and sandy nature, the docking was necessary to preserve the navigation. The same course has been pursued since Mr. Cook has been commissioner, in other places on the canal, wherever the soil was of that light, treacherous character.

E. CRANDAL.

Sworn and subscribed before us,
this 29th day of March, 1850.

M. Schoonmaker,
A. S. Upham.

Peter L. Mallory, being duly sworn, saith, that he lives at Rhodesport, on the Chemung canal; has until the last five years been engaged in boat building; about the middle of July last the water in the Chemung canal was unusually low; there are 17 mills on the Catharine creek above the feeder at Rhodesport. It is the custom on that creek to shut down gates in dams at night, drawing it off by day; at night during low water, with mill dams closed, there would not be sufficient water coming down the creek to throw any into the canal through the feeder; in a dry time there would be no necessity of keeping the feeder open at night to throw water in the canal, and if the feeder was closed none would run down to benefit any mills below. If there was sufficient water above lock No. 10, there would be no necessity of letting in the water through the feeder; never has seen or known the gates in feeder shut down to keep water out of the canal; if it had been so shut it would have been seen by witness; witness has seen it shut down when there was too much water in the canal, not when there was too little; the feeder runs through witness' lands, and his boat yard is right by the feeder.

PETER L. MALLORY.

Sworn and examined before us,
this 29th day of March, 1850.
M. SCHOONMAKER,
A. S. UPHAM.

Amzy Pratt, being sworn, says that he resides at Millport; have boated on Chemung canal for 7 or 8 years; am captain of a boat; heard testimony of Clauharty, and coincides with him in every particular except that he estimates the damages greater than Clauharty did arising from deficiency in the navigation.

AMZY PRATT.

Sworn and examined before us,
this 29th day of March, 1850.
M. SCHOONMAKER,
A. S. UPHAM.

Mahlon N. Alleman—resides at Millport; have been engaged in boating on Chemung canal for three years; am captain of a boat; was on the canal in the dry season during last summer in July; was on the level of the Chemung feeder, and there was a scarcity of water on that level at that time.

M. N. ALLEMAN.

Sworn and examined before us, this
29th day of March, 1850.
M. SCHOONMAKER,
A. S. UPHAM.

Hiram W. Bostwick, being sworn, says, that he resides in Corning, Steuben county; have resided there about 13 years; am engaged in the boating business; have, with my partner, about 30 boats of our own, and about the same number in addition chartered that we run on the canal; engaged in carrying coal. For the last ten years have had great difficulty on the lake level, and has no doubt that a thousand tons has been wasted and thrown off on that level to lighten the boats; have had from a dozen to fifteen boats abandoned by the men after they grounded on the lake level, they being discouraged by reason of the detention. The witness has, on thinking it over, made an estimate, and concluded that through such detentions and loss of coal thrown over, the witness and his partner have, during last ten years, lost enough to pay the whole expense of the state in making the improvements that are now in progress.

In respect to the size of this canal, is satisfied that the canal now making is not too large to insure good navigation; a smaller canal would fill up almost immediately.

In the Havanna level before it was docked, there was much inconvenience resulting from the sand washing in, and affecting navigation, and that the docking on such level was a necessary and proper improvement.

The purchase of land north of lock No. 1 made from Mr. Baily by Mr. Cook, was made for the witness and not for his (Mr. Cook's) own benefit.

H. W. BOSTWICK.

Sworn and examined before us, this
29th day of March, 1850.

M. Schoonmaker,
A. S. Upham.

On the 30th day of March, 1850, the majority of the investigating committee convened at Havana, Chemung county, and took the following additional testimony:

Caleb Allen, being sworn, says: That he resides at Pine Valley, in the county of Chemung; has resided there for about twenty years last past; am aged forty-nine years. Witness was superintendent on the Chemung canal for the two years, ending this last winter.

During both years that witness was superintendent, navigation in Brayton cut, and also in the inlet, was in bad condition, and navigation could not be kept up at all without keeping an under water excavator at work constantly, and also lighters to lighten the boats passing through that part of the canal.

Witness is well acquainted with the soil through which the Brayton cut is made, and also through which the new canal is being dug. Judging from the character of the soil and the effect of the action of the water upon that portion of the canal and inlet between Lock No. 1 and the lake, the canal now being constructed is not larger or deeper than is necessary to maintain good navigation. Without such an enlarged canal, the use of an excavator would be constantly required, and it is cheaper to make the canal of such enlarged size at first than to be at the expense of using an excavator.

Also knows the level between Lock No. 1 and Lock No. 2, where it runs through the village of Havana. On being shown and asked to read the 3rd and 4th charges of alleged fraud, and being asked to state all the matters of fact with which he is acquainted in relation to such charges, states: That so far as he knows, there is no truth in them. The level between Lock No. 1 and No. 2, or in other words, the Havana level, is a sort of sandy loam which washes in a great deal, and it is important for the free navigation of the canal, and the amount of shipping done there, that it should be docked up, and wide enough for these boats to pass. Before it was docked, and while witness had charge of the canal, the banks had washed in so, from the action of the water on the light, sandy soil, that in many places two boats could not pass. The docking by the State was commenced two years ago, and finished a year ago this spring. The object of the docking was to protect the banks from being washed in, and to keep up the free navigation. Frequently before it was done, boats were detained on the level an hour and a half and more, by not being able, from the filling in of the prism of the canal by sand, &c., passing by boats while they were loading on either bank. Witness considered the docking on the Havanna level, very important for the interests and protection of the canal.

Mr. Cook's basin on the Havana level upon which his store house stands, was docked up many years ago and long before he was Canal Commissioner. The only waste wier between lock No. 1 and No. 2, is over the aqueduct immediately at the head of lock No. 1; that waste wier is still there, and is in the same condition now that it has been in for many years. There is no other waste wier, nor ever has been upon that level. Between lock No. 2 and No. 3 a new waste wier was constructed last season in the latter part of the summer ; from that waste wier there is a ditch cut leading into Catharine creek above Mr. Cook's mill pond. The usual mode of constructing waste wiers on the canal are to fix them with gates so that the water can be drawn out of the canal through them when desired. When this waste wier was being constructed and put in, it was framed for gates in the ususal manner, and the gates were all made and ready to be put in. Mr. Cook directed witness not to put them in because he said it was above his mill, and there might be censures that he could hoist the gates for the benefit of his mill, and therefore he would not have them there. It was then fixed tight and permanent by planks spiked on and earth thrown against it so that the water could not leak or be drawn through. The top of waste wier is higher than the top of the lock gates, and the water runs over the lock gates before it can escape or run over the waste wier. That is the only waste wier below lock No. 3 which can discharge any water into Mr. Cook's pond or the stream running into it A waste wier of that kind is necessary on that level for the purpose of discharging the surplus water in freshets and high water, and thus relieving the locks. There is a stream of water which discharges itself into the canal from the hills on that level, and renders such a waste wier particularly for times of freshets and wet weather very necessary ; and no water can be discharged by such waste wier into Mr. Cook's mill dam except when there is a great surplus of water on that level.

Do not know of Mr. Cook's being interested prior to last fall in any land or real estate adjoining the enlarged canal which was designed to be benefited by the improvement.

relation to the feeder at Rhodesport, the water has never been shut off in that feeder from the canal to the detriment of navigation. The gates in that feeder were under the control of this deponent as the superintendent, and the lock tender under him. Those gates were always kept open until there was a sufficiency of water, and never closed except to prevent a too great a supply of water in the canal. The directions of the Commissioner in charge were to keep up the navigation, and the witness was never influenced in the closing of the gates by any consideration of benefit or advantage which might be derived therefrom by the mill owners below.

Since Mr. Cook has been Commissioner and while witness was superintendent, other portions of the canal when the business of the canal and its situation required it, have been docked under direction of the Commissioner. At Millport considerable docking has been there done, and a basin docked up between lock 27 and 28, and some docking between lock No. 28 and 29, and in many other places on the canal.

CALEB ALLEN,
State Superintendent.

Sworn before us, this 30th
day of March, 1850,
M. SCHOONMAKER,
A. S. UPHAM.

Caleb Hill, being sworn, says:—That he resides at Havana; has resided there for twenty-one years last past. Am a carpenter and joiner by trade. Am aged 47 years. Was collector on the Chemung canal in 1846. In relation to Mr. Cook's basin, adjoining his storehouse, states that it was docked in the spring of 1837, and dug out at the same time. That was done by the firm of which Mr. Cook was a member, at their own private expense. Witness recollects the time, because before that he kept a grocery, and there was no place to turn a boat in the canal in 1836, or until Mr. Cook's basin was made. Since that time, and before Mr. Cook was Canal Commissioner, the basin was cleaned out, so as to take the bars out of it, at the public expense, as there was no other place at the time for boats to turn round; but the dock was kept up at Mr. Cook's private expense.

Before the Havana line was docked, by reason of the washing of the banks occasioned by the swell and action of the water on that line, the bottom of the canal filled every season, more or less, so as to interrupt navigation. It rendered cleaning it out necessary every spring, and mostly every season bars would accumulate every summer, so as to impede navigation; and for that reason docks became necessary to obviate the difficulty.

During the time witness was collector, he was frequently called on in relation to difficulties on that level in boats passing, while some were loading, occasioned by the canal being so narrow, and the prism filled in from the washing of the banks.

Have been engaged in boating business for about nine years. In navigating the late level, always found difficulty in its navigation from the bars formed in it, which kept so changing that you could not, one season, judge where the bars would be the next.

From the character of the soil and the result of the experiment in the Brayton cut, the witness thinks that the canal on the late level is no larger than is necessary to secure good navigation.

That in some places in the inlet below the Brayton cut, where there was formerly fifteen feet of water, from the narrowness of the channel it had become so filled up, that the boats ran aground last season.

CALEB HILL.

Sworn and examined before us, this }
30th day of March, 1850. }

M. SCHOONMAKER,
A. S. UPHAM.

Charles W. Wentz, being duly sworn, says:—He resides at Havana, Chemung county. Is resident engineer, in charge of the Chemung canal; has been the engineer in charge since January, 1848. Witness made the preliminary surveys and estimates in relation to lowering Seneca lake in February, 1848. Witness also made the location of the lines for the construction of the Chemung canal extension, and presented the plans and estimates to the Canal Commissioners in July, 1848; upon which the resolution of the Canal Commissioners, ordering the construction of the said extension, was based. The work is now being constructed, in conformity with said resolution.

Witness has taken a series of observations in regard to the high and low water in Seneca lake for several years past. The lowest water observed by witness was in March, 1848, previous to the spring rains. This observation was taken on the lower mitresill of lock No. 1: the depth of water was $4\frac{45}{100}$ feet.

The highest water in the lake known to the witness was in the spring of 1841, and was at the lake $9\frac{24}{100}$ above the mitresill of lock No. 1, giving a difference between high and low water of $4\frac{79}{100}$ feet.

This variation of the water in the lake, would give a depth of water in the work now constructing, in high water, of $12\frac{37}{100}$ feet, and in low water it would be but $7\frac{58}{100}$ feet. Witness thinks the removal of the obstructions from the outlet, and carrying out the provisions of the law of 1844 in relation to the lowering of Seneca lake, would reduce the level of the lake equal to the lift of the lock below Geneva, which is $1\frac{47}{100}$ feet. The opening of the outlet and doing away with the lock, would give a double capacity to the discharge from the lake, and prevent the excessive fluctuation of the water in the lake. The original examination, on which the report of February, 1848, was made, was made with reference to carrying out the law of 1844, in reference to the lowering of Seneca lake. The base of the Chemung canal extension was selected by witness with special reference to the carrying out of the law of 1844, and is the same as the lower mitersill of the lock below Geneva, on the Cayuga and Seneca canal, which is to be dispensed with under that law. Two plans were presented by witness to the Canal Commissioners in his report of July, 1848, for the construction of this improvement.

One plan was to excavate the prism of the canal down to the base established, lower mitersill of lock below Geneva, and make the bottom 37 feet wide, and placing a stone facing on the slopes of the banks, leaving the bottom, when completed, 26 feet wide, with banks sloping 3 feet horizontal to 1 foot perpendicular. The witness estimated the cost upon this plan at $45,686.99; this sum did not include the deepening of the Brayton cut to make it conform to the new base.

The other plan presented by witness, was the plan adopted by the Canal Commissioners. This plan was, to dispense with the stone facing, and give the canal an extra depth of two feet in the prism, and making the bottom 42 feet wide, with bank slopes of 2½ feet horizontal, to 1 foot perpendicular. Witness estimated the cost upon this plan at $40,001.54. Witness' estimate for reducing the Brayton cut to this plan at $22,442.20, making the total cost of the whole improvement $62,443.77.

Witness was employed as an assistant engineer upon the Chemung canal in the years 1840 and 1841, and until the spring of 1842; as such assistant, had charge of the construction of the Brayton cut; the bottom of the Brayton cut as originally constructed, was 10 inches above the mitersill of lock No. 1, at Havana; the lock was constructed the same winter; the lock was placed lower than the Brayton cut to provide against extraordinary low water; the Brayton cut was left above the lock to save the expense of excavating; it was thought to be low enough for the lowest water; but the lock was placed lower to provide for the contingency of extraordinary low water, as the level could be more easily excavated to keep up navigation in case of such contingency, and if the lock should offer an obstruction by being placed too high, it would be an obstacle that could not be remedied during navigation. The Brayton cut is about 1¼ miles long, and was originally constructed upon the plan presented by witness to the Canal Commissioner, of facing the banks with stone. Witness based his estimates of the cost of constructing the work upon this plan, upon what he knew of the cost attending the construction of the Brayton cut. Witness thinks the plan adopted was the best that could have been adopted within reasonable limits of expense to ensure a good navigation; the plan is also in his opinion much cheaper than to have constructed it upon the plan of the Brayton cut. The cost of the whole work upon the plan adopted, witness thinks will not exceed $50,000; this includes the improvoment of the Brayton cut. The object of witness in giving an extra depth and width to the canal was to provide for the deposites from the wash of the banks, and secure a permanent navigation; the line of the work is over a marsh which is easily acted upon by the water, and the banks slide in considerable quantities into the prism; this extra depth and width in the prism will guard against the interruption of navigation from this cause; it was to guard against the wash and sliding of the banks that the stone facing was placed on the Brayton cut. The facing on the Brayton cut does not entirely protect the banks and the prism of the cut has been filled in so that it is now about 14 inches above the mitresill of lock No. 1.

Witness thinks that the navigation could not be maintained a single year, without under-water excavation, upon a canal of the ordinary dimensions, constructed without any protection or support to the banks; the deposites from the banks would be so great, that it would require constant dredging, during the season of low water.

The low water mentioned, as observed by witness, in March, 1848, would give a depth to Brayton cut, as originally constructed, of

3.61 feet; and as the bottom now is, of 3.28, there would not be a width of bottom of this, of more than 10 feet, on the account of the sliding in or deposites from the slopes along the foot of the banks. A number of boats were detained during the season of navigation, of 1848, on the Brayton cut, for want of sufficient water.

The height of the water in the lake, is varied more or less by the winds; a north wind would make a difference of 3 or 4 inches, in height of water at the head of the lake, if it continued twelve hours or more; and the same difference, if it blows in a contrary direction. Its effect would then be, to rèduce the surface of water at the head of the lake.

With six feet of water in the Chemung canal extension, as now constructing, the width on the surface, would be 72 feet; the extra width of the canal, will produce less action of the water, by the moving of boats, and the swells occasioned by lockages, would not be so great, and would, as a consequence, have less effect upon the banks.

I think the docking on the Havana level, was a necessary improvement, as an accommodation to boats navigating the canal, and that it will prove of great benefit in maintaining the canal in a navigable condition, on account of the peculiar character of the soil, through which it is constructed.

CHARLES W. WENTZ.

Sworn and examined before us, this
30th day of March, 1850.

M. SCHOONMAKER,
A. S. UPHAM.

State of New-York.

No. 106.

IN SENATE, FEB. 18, 1850.

REPORT

Of President and Secretary of Governors of the New-York Hospital.

New-York, Feb. 15, 1850.

SIR—I herewith transmit to your address the annual report of the Governors of the New-York Hospital to the Legislature, and I respectfully request that you will be pleased to lay the same before the Senate.

I am, very respectfully,
Your obedient servant,
GEO. NEWBOLD.

HON. G. W. PATTERSON,
President of the Senate.

REPORT.

TO THE LEGISLATURE OF THE STATE OF NEW-YORK.

In obedience to the act prescribing an annual report of the State of the New-York Hospital, the governors of that Institution respectfully submit the following

REPORT.

During the year which has just expired, the increase of the population and commerce of this city, with the accompanying increase of disease and accident, have continued as in former years, to make more extensive claims for the relief of the destitute or helpless affected by disease. The liberal means placed at the disposal of the Board by public and private beneficence, have enabled them to meet these demands with that efficiency which has hitherto secured the public confidence, and annually relieved a vast amount of suffering.

The income of the corporation for 1849, with the unexpended balance at the close of the preceding year, was sufficient to meet all its current ordinary expenditures, together with the cost of one additional building at the Bloomingdale Asylum; and there were no outstanding debts of the Institution on the 31st December, 1849.

THE NEW-YORK HOSPITAL.

The whole number of patients who have received the benefits of this establishment in the year 1849, was 29 more than in 1818, and exceeded the number of any preceding year, except that of 1847, being about double the average of the preceding 25 years.

The number of patients in the several buildings of the hospital in the city, on the 31st day of December, 1848, was two hundred and seventy-nine, and there were admitted during the year 1849 three thousand three hundred and twenty-nine, making a total of three thousand six hundred and eight, who have received the benefits of the Institution during the past year.

Of this number there have been cured,	2,589
Relieved,	139
Discharged at their own request,	126
Discharged as improper objects,	19
Eloped or discharged as disorderly,	93
Died,	361
	3,327
Remaining in the hospital Dec. 31, 1849,	281
Total number treated as above,	3,608

Among the deaths are included 116 casualties, and other cases of sudden deaths falling under the charge of the coroner, which terminated fatally soon after being brought to the hospital, being double the number of such cases that have occurred in any preceding year. Such cases requiring immediate medical or surgical aid for any hope of relief, are received without any reference to the probability of cure; otherwise no patients are received whose cases do not apper to the physicians or surgeons to admit some probability of cure, or of substantial though temporary relief.

Deducting the cases of sudden death resulting from casualty, the entire number of deaths was 245 out of the other 3,492 medical and surgical patients. Thus the practice of the Hospital during 1849, presents the following results. Of the whole number under treatment, deducting those remaining at the close of the year, $77\frac{83}{100}$ per cent were *cured*, and deducting casualties as above enumerated, $7\frac{4}{100}$ per cent *died*.

The receipts of money for the hospital during the year 1849, were as follows:

State annuity,	$12,500 00	
Board of seamen,	15,933 29	
Board of pay patients,	10,811 54	
Articles sold,	109 66	
Tickets sold to students,	490 00	
Subscription,	40 00	
Recovery of penalty,	30 00	
		$39,914 49

The expenditures during the past year were as follows:

House expenses,	$26,086 59	
Wages,	11,766 68	
Repairs and improvements,	4,402 89	
Medicines, $2,727.83; porter and other liquors for use of patients,$1,123.45,.	3,851 28	
Surgical instruments, $321.36; leeches, $242,	563 36	
Apothecary shop, for bandages, lint, &c.,	636 76	
Burials, $288.78; seamen's passages, $14.27,	303 05	
Furniture,	186 20	
Increase of library, $531.31, and pathological cabinet, $118.50,	649 81	
Insurance, $127.37; gas light, $146.00,	273 37	
Salary of resident surgeon, being a temporary substitute,	287 75	
		$49,007 74

Excess of payments over receipts for New-York Hospital in 1849,	$9,093 25

The charge for pay-patients, whether seamen paid for by the U. S. government out of the avails of the Hospital money, or others supported by private means, or by societies, has always been brought down to the very lowest rate of actual disbursement, excluding all compensation for medical attendance, for rent, superintendence, and other similar items. In numerous individual cases, and in some whole classes of cases, the cost to the institution is often double the amount of payment.

The reception of this class of patients is regarded by the Governors, as one of the most valuable features of this establishment, as it brings the aid of the highest medical and surgical skill, within the reach of persons from all parts of the State, whose circumstances, though straightened, and whose feelings would not permit them to ask admission as paupers, whilst their means are wholly inadequate to provide elsewhere the professional and other attendance required for the cure or relief of the severe forms of disease.

The following analysis of the number and times of continuances of the several classes of patients, exhibits in one view, the operations of this institution, in relation to the persons provided for, and relieved gratuitously in whole or in part.

Recapitulation.

There were in the Houses on the 1st of Jan. 1849,	279 patients.
received during the year,..........	3,329
Making the total who received the benefits of the Institution in 1849,......................	3,608
There were discharged, including deaths,......	3,327
Remaining in the Houses on the 31st Dec., 1849,	281

Of those under treatment January 1st, 1849,

100 were seamen,	
47 paid for themselves in whole or in part,	
19 were paid for by sureties,	
113 were paupers,	
Total, —	279

Of those admitted during the year,

1227 are seamen,	
1006 paid for themselves in whole or in part,	
103 were paid for by sureties,	
993 were paupers,	
Total, —	3,329
Making the whole number treated as above,...	3,608

Of the pay patients 490 became paupers and remained such during their continuance in the Hospital.

The foregoing statements show the following results :

	1327	seamen have been under treatment,..	$5,199\frac{6}{7}$ weeks.
	1175	pay patients,....................	3,504 "
	1596	paupers,.......................	7,821 "
	4098		
Less	490	transferred from pay to pauper list,	
	3608	patients treated in the aggregate,...	$16,524\frac{6}{7}$

The time thus stated has been occupied by the several classes of patients thus :

$31\frac{46}{100}$ per cent. by seamen.
$21\frac{21}{100}$ " " sureties and other pay patients.
$47\frac{33}{100}$ " " paupers.

The average proportion cured is, ...	$77\frac{83}{100}$	per ct.
" " relieved, ...	$4\frac{18}{100}$	"
" " discharged by request,......	$3\frac{78}{100}$	"
" " as disor'ly or eloped,	$2\frac{79}{100}$	"
" " improper objects, ..	$\frac{57}{100}$	"
" " of deaths, (including sudden deaths from accident, as above stated,)..........	$10\frac{85}{100}$	"

The average time the patients have remained under treatment was 3 weeks, 3 days a 17 hours.

" number in the houses during the year has been, $302\frac{68}{100}$.

The governors had occasion, in a former report, to express their satisfaction that "the heavy expenditures of the last five years, in the erection of the North hospital edifice, the introduction of the Croton water throughout the several buildings, and other important and expensive improvements, have been made at a period when they could be effected without permanent inconvenience to the finances of the institution, and just in time to meet the increased demands of the community, which have suddenly been augmented beyond all probable calculation." The prevalence of cholera in the city and its neighborhood, during the last summer, tended rather to diminish than augment the claims for other hospital assistance ; as this disease falls within the class of those which cannot be admitted into a general hospital, and abundant provision was made elsewhere for those attacked by it. Only three cases of cholera appeared within the walls of the establishment. Under these circumstances, the experience of the past year, combined with that of the two preceding years, (during which term 10,544 persons have received the benefits of the institution,) strongly confirms the opinion expressed by this board in their last year's report, "that these claims of the suffering and the destitute will probable continue to increase; not, indeed, with annual regularity, but as heretofore, with a large average augmentation in every period of four or or five years, so that the accommodation for patients in our present buildings will, before very long, be inadequate for the relief even of the more urgent cases.

It therefore becomes a subject of serious inquiry, how these demands of humanity can be met, and how far the means of the institution can be increased and made adequate to supply the public wants.

The hospital continues to promote the interests of medical and general science and education, so far as may be done without interfering with the comfort and cure of the patients; regular records of the cases occurring in the practice of the house have been kept, and clinical and other lectures have been delivered by able and learned instructors.

The instruction thus given has been attended by students from all parts of this State, and from other States. The sale of tickets admitting students to the attendance on clinical instruction, and to the use of the library, forms a fund which, without encroaching on the general revenue of the institution, has furnished the means of gradually collecting an excellent library of works on medicine and its auxiliary sciences, now amounting to 5,474 volumes. This collection has been increased during the last year by regular additions of the most valuable new publications in the branches of science to which it is exclusively devoted.

The cabinet of preparations, and other illustrations of healthy and morbid anatomy, has received large and valuable accessions, and is now arranged in two spacious rooms, appropriately fitted up for the purpose.

Thus it is trusted that the New-York Hospital continues to constitute a most valuable branch of the system of medical instruction given in the public and private medical schools of this city.

THE BLOOMINGDALE ASYLUM FOR THE INSANE.

The number of insane patients in the Asylum on the 31st of December, 1848, was 119, and 95 were admitted during the last year; making a total of 214 persons who have been under the charge of the establishment during some portion of the year 1849. The number of patients decreased during the last year, in consequence of the recent establishment and successful operation of similar institutions in neighboring States, especially of that founded by the State of New-Jersey, most of whose insane poor had hitherto been received at this institution.

Of the whole number, there have been

Cured,	44
Improved,	33
Unimproved,	13
Died,	21*
Remaining, 31st December, 1849,	103
Total,	214

The proportion of recoveries to the whole number of cases, though considerable, does not adequately represent the efficiency of the curative treatment here applied to cases of recent date, or otherwise capable of cure or relief; as the aggregate number of patients is swelled by many old cases, annually increased during twenty-eight years, since the Bloomingdale Asylum has been opened for the reception of patients. In most of these cases the disease has become chronic, and little can be hoped for beyond continuing to provide for them a comfortable and secure residence, under proper medical care, for the remainder of their lives.

The inmates of the Institution have generally enjoyed good bodily health. They were entirely exempt from Cholera, though that disease prevailed to some extent in its immediate neighborhood; they have been free from all other epidemics, and have suffered but little from acute maladies of any kind.

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* Eight of the deaths took place in less than a month after reception of the patients.

The receipts of money for the Bloomingdale Asylum during the year 1849, have been as follows:

For State annuity,......................	10,000 00	
Board of patients,......................	27,511 37	
Articles sold,..........................	394 62	
Sale of land,...........................	500 00	
		38,405 99

And the expenditures during the same period, were as follow- :

Hous eexpenses,.........................	13,924 83	
Wages,..................................	8,976 59	
Cash refunded,..........................	520 36	
Repairs and building,...................	5,984 21	
Insurance,..............................	474 50	
Fees,...................................	100 00	
Total,..................................		29,980 49
Excess of receipts over expenditures for Asylum in 1849,		$8,425 50

Dr. Pliny Earle, who has held the medical charge of the Bloomingdale Asylum since 1844, continued to discharge these duties until April 1849, when he resigned the office. The Governors elected, as his successor, Dr. Charles H. Nichols, who was recommended to them from his having for some years specially devoted himself to this branch of his profession, and who had for some time filled the office of Medical Assistant at the State Asylum, near Utica. Dr. Nichols continues to apply the general system of medical and moral treatment hitherto successfully followed in this Institution, with such improvements as his experience and observation in similar establishments may have suggested.

The means of exercise and employment afforded by the spacious grounds and garden and the farm of the Institution, together with the occupations and amusements of private life provided within doors, which have long been relied upon as the most efficient adjuncts to medical treatment, have received the constant care and supervision of a Committee of the Board, to whom the management of the Asylum is specially delegated, and who report their proceedings monthly to the Board of Governors.

The Governors being convinced that the establishment would be benefited in many ways, by providing a residence for the Physician separate from the rest of the buildings, have erected during the year a substantial and commodious dwelling fitted for the accommodation of a family. It is situated within the grounds of the Asylum, at a short distance from the other buildings.

The Governors feel a well-grounded confidence, that the experience of the last forty-four years, during which time this corporation has rendered an annual account of their administration to the Legislature, has shown that the bounty of the State has been wisely bestowed, and usefully and economically applied; yet they cannot close their report without respectfully calling the attention of the Legislature to the history and nature of the State grant to the New-York Hospital. As this grant, which was formerly paid regularly by the State treasury, in pursuance of permanent acts, now, according to the revised constitution, requires an annual or biennial re-appropriation, it seemed to be regarded by some members of late Legislatures as a subject open to be examined on new grounds of expediency or economy. The history and character of this grant were fully set forth in the annual report of this corporation, made in February, 1849, which is to be found in the legislative documents of the last session, to which the Governors respectfully refer the Legislature. They will now state briefly, that the two annuities in question were specific grants for a term of years yet unexpired, and made by acts of 1806 and 1816, for specific purposes and for specific considerations. The conditions of the grant having been faithfully complied with on the part of this corporation, by the application of means and services to the public object in view, much beyond anything that the monies granted by the State could have effected, these annuities, so long as the duties resulting from the grant are faithfully performed, are vested rights in this corporation, to which the faith of the State is as much pledged as for the payment of its public debt.

Whilst, therefore, the Governors will not only willingly submit to, but do most cordially invite the vigilant supervision of the Legislature, they trust that it is only necessary to call their attention to the above considerations to prevent any doubt or delay in making the constitutional appropriations for the two annuities to the New-York Hospital and the Bloomingdale Asylum.

GEORGE NEWBOLD, *President.*
ROBERT J. MURRAY, *Secretary.*

New-York, February 8th, 1850.

State of New-York.

No. 107.

IN SENATE, FEB. 20, 1850.

ANNUAL REPORT

Of the trustees of the Northern Dispensary of the city of New-York.

To the Honorable the Legislature of the State of New-York:

The trustees of the Northern Dispensary of the city of New-York, in compliance with the requirements of the act of the Legislature of the State of New-York, entitled "An act to enable the dispensaries in the city of New-York to extend their benefits," passed 21st April, 1841, do hereby

Respectfully Report:

That during the year 1849 their Dispensary has furnished medical attendance and medicine to 19,360 individuals as recipients of their institution, of whom 9,487 were attended at their dwellings, and 9,873 were attended at the Dispensary.

3,592	of the individuals were	born in the	United States.
14,780	do	do	Ireland.
316	do	do	England.
248	do	do	Scotland.
314	do	do	Germany.
110	do	do	other countries.
19,360	being the total number treated.		

882 of the above individuals were also vaccinated. The said trustees further report that they have constantly kept on hand a supply of genuine vaccine matter, which has been furnished gratuitously to all physicians and surgeons applying for the same.

All which is respectfully submitted.

NORTHERN DISPENSARY,
New-York, Jan. 1850.

B. ELLIS, *Prrsident.* [L. S.]

Attested,
CHA'S R. WHITTEMORE, *Sec'y.*

State of New-York.

No. 108.

IN SENATE, APRIL 2, 1850.

REPORT

Of a majority of the committee on Indian affairs on the memorial of the chiefs and warriors of the Seneca nation of Indians.

Mr. Owen, from a majority of the committee on Indian affairs, to which was referred a communication from his excellency the Governor transmitting the memorial of the chiefs and warriors of the Seneca nation of Indians, (Senate Doc. No. 59,)

REPORT:

That the committee have given to the subject embraced in the memorial much and careful deliberation. The memorial referred to the committee has grown out of a revolution or change of government that has, within the last two years been effected, so far as relates to the Cattaraugus and Allegany reservations, and the Seneca Indians residing thereon. Until recently the administration of the government of these Indians was vested in the chiefs and head men of the nation. There are eight separate clans of Indians belonging to the Senecas, and each clan heretofore has had its own chiefs. The manner of electing their chiefs was well calculated to insure, so far as any provision could insure, from these unlettered sons of the forest, the selection of their wisest and best men for chiefs. In the first place, each clan selected its own candidate for the honors of the chieftainship. The wives and mothers as well as the warriors had a voice, and *all must agree* in the selection. When unanimity is arrived at in the clan, then the name of the candidate was presented to the chiefs of all the clans in reservation council. If approved by them, he is then presented to a council of the whole nation in general council, and if there approved he was invested with the rights, the powers and the insignia of office. He becomes then a chief of the Seneca nation.

It cannot be denied that the system was admirably calculated to bring forward and invest with power the wise and great men of the nation. It was to this system that the Seneca Indians were indebted for the great names that have so often adorned their history. It was under this system that Red Jacket, whose immortal eloquence can never be forgotten, was elected to the chieftainship. It was this system that gave to the Indian councils such mighty men as Cornplanter and the still surviving Governor Blacksnake. Under this system the Senecas have lived as long as we have any record of them, and were, if not an educated and progressive, at least a contented and united people.

Things would still have remained in the same condition with them if new elements of discord had not been thrown recently among them. The sale and cesssion of Indian lands in the eastern part of the State has been the cause of throwing among the Seneca's numbers of other tribes, who have come to live with and upon them. Mingled with the Senecas, and residing upon their lands, are numbers of the Delaware, Onondaga, Cayuga and Oneida Indians. As these tribes have relinquished and sold their own possessions, the Senecas have generally allowed them to come among them to settle upon the Seneca lands "without money and without price." But so far as their own government was concerned the Seneca Indians regarded them as aliens, and except in a few instances of adoption into the Seneca tribe, have refused them any share in the Seneca government.

Until the summer of 1848, the government under which these Indians had lived from the most remote generations, so far as the committee can learn, had never failed to give great and almost universal satisfaction. The government was admirably adapted to their primitive condition. That government was pure, wholly patriarchal, and the affection and attachment every where evinced among them for their chiefs, was proof conclusive that the Seneca people regarded their chiefs more as fathers than as rulers. Some time in the summer of 1848 a constitution or form of government was procured to be drawn up by a member of the legal profession, residing in the neighborhood of the Indians; by whose procurement this constitution was prepared your committee are uninformed, but the principal, if not the only individual Indian, who took any great interest in the attempt to change the Seneca government was an educated Cayuga Indian, residing upon or near the Cattaraugus reservation. By his advice and procurement two individual Indians from the Allegany reservation, together with such as he could induce to attend from the Cattaraugus reservation, met together at Cattaraugus, and there pretended to adopt the present constitution. It must be remembered that in no assemblage of the chiefs or warriors, or in any other regular meeting of the Indians, had a single step been taken to call a meeting or convention of the Indians for any such purpose. After the self-constituted meeting had adopted their constitution, the ratification of their doings was never submitted to the Seneca people. The constitution was written in the English language, and has never, so far as we can learn, been translated into the Indian tongue. If it had been, it is not probable that one in twenty could read, and not one in fifty could comprehend its meaning.

This constitution as is generally known, is republican in its character, and contains some provisions that are calculated to advance the well-being and interests of the Senecas. The propriety or policy of establishing an elective republican government, with a written constitution, over such a people as the Senecas, may well be doubted. Notwithstanding all that has been said about their great progress in civilization and the arts, the Seneca Indians still retain the distinctive character of their forefathers. Both of the undersigned have resided in the immediate neighborhood of these Indians for many years. If this simple people have made any great advance towards civilization, or any great progress in the useful arts and sciences, the proof of it has escaped them. It is a fact notorious to all who have resided in the neighborhood of Indian tribes, that their intercourse with the white man has seldom been productive of results beneficial to the Indians. They learn the vices, not the virtues or industry of their white neighbors. The fate of the Senecas has not been singular in this respect.

On this subject, the committee have been permitted to copy a letter from a distinguished citizen of western New-York, addressd to a member of the Assembly. He says: "I had intended to have written you in relation to the present condition of the Indians. Doct. Wilson and others, but Wilson chiefly, about a year ago went into a project of radically changing the government of the Indians, by which the chiefs were *deposed* and elective counsellors created in their stead. I knew at the time this was all wrong. The Indians had not become sufficiently advanced to permit this change, and I predicted that if it was done, against the desire of the chiefs, and they refused to act in it, the consequence would be that the governing power would vest in the hands of the most corrupt and profligate portion of the Indians, and those in whom the sober, intelligent and industrious portion of the Indians had no confidence. That the *trickish*, *dishonest*, *drunken*, *lazy demagogues* would procure themselves to be elected counsellors to the total exclusion of that portion of the chiefs whose counsels alone were of any use to the nation It has turned out so, and the resolution of the last Legislature recognizing the new organization, should be rescinded, and I hope you will do all in your power to accomplish it. You know my position as an *Indian man*, *soul and body* devoted to what I believe to be for their interest and welfare, without any personal interest whatever. I have long been conversant with their affairs, and feel a strong solicitude for their prosperity; but this new organization is fast producing their ruin, and should be repealed. Were I well, and my *poor vision* would permit me to write, I could fill this and another sheet with reasons and proofs for my opinion."

The writer of the foregoing has been the fast and undeviating friend of the Seneca Indians, and their neighbor during a long life. He has rendered them great service both at their own council fire and in the halls of Congress. The undersigned concur with him in opinion, that unless the voice of the Senecas shall be heard and they be permitted to restore the government of their fathers, with such modifications as the nation may choose to make, the consequences will be unfailing division, disaster and ruin to their nation.

The recent history of the Senecas shows the remarkable fact that a minority of their numbers have exercised successfully the power of subverting their ancient government, and creating a government of their own, against the will of the majority. Although seventy-two names are appended to their constitution, as presented to the Legislature in 1849, it is understood that not over thirty to forty Indians of the Senecas at any time acted in the adoption of their constitution, and that these seventy-two constitute all that could be induced to sign it any time previous to its presentation to the Legislature, whether they were Senecas or Indians of other tribes living among them. Very soon after these malcontents had adopted the constitution, measures were taken to induce the Senecas to submit to it. Among other courses adopted, was the withholding the payment of annuities that properly belonged to them. The chiefs and many of their friends refused to receive their portion of the annuities upon the terms prescribed by the agent. It has been charged repeatedly that arrangements were made between the Indian agent and the new government party, that each was to sustain the other. No proof has been furnished to the committee upon that subject.

But a reference to Assembly Document No. 108, for 1849, will show upon what grounds the then Indian agent felt authorised to report to the Indian bureau at Washington that a "majority of the Indians residing upon the Cattaraugus and Allegany reservation were in favor of the new government." This agent in his wisdom decided that those Indians who consented to receive the annuities *per capita* were in favor, and those who refused so to receive their portion of such money were against the new government. If this agent had every Seneca Indian in prison, and under his control, and upon his offer of bread to sustain life, a majority should take, eat and live, he might just as well decide that the Senecas were in favor of their imprisonment, and opposed to liberty of action.

Yet such was the report that was made by the sub-Indian agent to the Indian Department, at Washington. The consequence was that Mr. Medill, of the Indian bureau, on the 2d Feb., 1849, advised the sub-agent that "the new form of government of the Indians on the Cattaraugus and Allegany reservations will be recognised by the government, and so far as may be necessary the relations of the government with those Indians will be made to conform thereto." See Assembly Doc. 108, of 1849.

Thus did a small minority of the Seneca Indians, led on by a Cayuga, in the short space of a few months effect a revolution, deposing the chiefs and rulers of this people, and by their own instrument declare that their own men should be officers. They named, created and installed their officers without asking the Senecas to ratify or reject their action on the subject. Then commenced the struggle for the mastery. While this struggle was going on, and before any election under the pretended constitution was held, the government at Washington gives to this most glaring usurpation, character and strength by declaring it "the government of the majority of these Indians." Without this, and the aid and influence of the sub-agent, the whole thing would have fallen to the ground, as in fact should, a miserable abortion. It now had consequence and life.

The first election, under that constitution, was held in May, 1849, at Cattaraugus reservation. Allegany reservation is situated *at the nearest point thirty miles distant* from Cattaraugus. The reservation is forty miles long, and many of the Indians to have availed themselves of the privilege of voting would have been compelled to have travelled, even if they had heard of the election, over sixty miles to deposit a ballot which they could not read or understand. It is too much to suppose that any thing like a full vote could be taken under such circumstances. It is true that by dint of exertion and excitement more were drawn out than could be again. But when they approached the ballot box there too the feeble, the wavering and ignorant were told that unless they voted for the constitutional party they could get no part of the Indian annuities. Many of the chiefs and their friends refused to take any part in the election, while others voted for a ticket composed of the chiefs and their friends. The result showed out of three hundred and seven votes cast the constitution party had a majority of sixty-one, 184 to 123 votes. It will be easy for any man acquainted with Indian character to see that the sub-agent alone could produce this result. If the ballot is no very good exponent of the public will when wielded by the worthless and ignorant in our commercial metropolis, and if, as is often said, the market price of such votes is *one* dollar a head, what result would any one expect from a voter who never had heard of the alphabet, and when *four* (instead of one,) dollars was offered as the reward or withheld as the punishment of his vote.

The committee are of opinion that the new government never had and cannot have a majority of the votes of the Seneca nation in its favor. Representatives from both parties have been heard before them. Dr. Peter Wilson has been heard repeatedly in behalf of the new government, of which he is the life and soul. He supposes the number of Seneca Indians on the Allegany and Cattaraugus reservations over twenty-one years of age to be about 325, while several of the chiefs represent the number to be about 400. Whichever of these numbers approximate nearest to truth, it can be still established that the majority of the Senecas are opposed to the new government. Because the constitution provides that "every male Indian of 21 years of age shall be a voter," without regard to tribe or nation. Indians of all tribes were not only converted into voters, but were invested with rights to the soil of the Seneca lands, no matter whether such Indians belonged to the United States or the Canadas. Of this class of voters the constitution received an accession of about forty. High and active among this number was Dr. Peter Wilson, who though pressing and voting republican government and democratic institutions upon the Senecas, has at this session presented a petition to the Legislature in which he repudiates for the people to which he belongs the same democracy, and signs his petition as "*Chief and Sachem of the Cayuga Indians.*"

But suppose Dr. Peter Wilson's numbers to be correct, and that the Seneca voters number only 325. The petition presented to your committee is signed by two hundred and thirty-four chiefs and warriors of the Seneca nation. Dr. Wilson had the privilege of examining this petition, and upon such examination he objected to four names, three on the ground that they were not of age, and one that it appeared twice on the petition. The chiefs readily admitted that the three first were under 21, although some one or two were men of families, but insisted in the other case that there were two individuals of the same name. Strike out the three names of the men under age, and we have 231, leaving only 94 to make up the 325 of Wilson's number. Let it be remembered too that this number of ninety-one thus allowed to the constitutional party is twenty-two more than have ever recorded their names in favor of the new government on any petition, memorial, or anything else that the committee could reach or obtain.

But this is not all. The Seneca Indians from time immemorial constituted one government or nation. They held and resided upon four reservations in western New-York until within a few years past. By treaty, the history of which is known to all, two of these reservations, the Buffalo and Tonnewanta were sold and ceded to the Ogden company. The Senecas residing on the Buffalo creek reservation surrendered their lands under this treaty, and ultimately removed to and settled upon the Cattaraugus and Allegany reservations. This they had a right to do, as the Indian lands of the Seneca nation are held in common by them, and each has the right to select his residence upon any of their lands not already occupied. It was this removal from Buffalo that brought Dr Peter Wilson to reside at Cattaraugus.

The Indians residing on the Tonnewanta reservation took a different course, and refused to leave or abandon their lands in pursuance of the treaty, and have been and now are engaged in contesting the conveyance of their reservation before the judicial tribunals. If they succeed in holding their lands, they will remain in all human probability thereon. If they are worsted in their legal conflict, a result easily to be foreseen, they have but one resource. They will be driven to the reservations of Cattaraugus and Allegany as the last vestige of the soil now left to this once strong, but now feeble and injured people.

Have they no interest in the form of government they are to find in being? Shall it be permitted to a small minority of that portion of their nation residing upon two reservations, aided by the desparate renegades from other tribes, who have been permitted to remain in a kind of friendly alienage among them, to overthrow the government of their fathers, and to substitute constitutions and ballots and forms which they do not understand. Every principle of reason and justice forbids that the State of New-York should lend its countenance or support to such a transaction.

It is then right and proper to add to these two hundred and thirty-one chiefs and warriors, residing upon Cattaraugus and Allegany, whose petition is before us, the whole number of Indian voters residing upon Tonewanta reservation. They are understood to be unitedly opposed to the new government. There is as near as your committee can learn about one hundred Seneca Indian voters residing at Tonewanta. Add thereto the two hundred and thirty-one and we find according to the figures of Dr. Wilson himself that *three* *hundred and thirty-one* of the Seneca voters oppose the new government, while it is supported by only ninety-four, showing thus that more than three to one of that people are opposed to this change of government. The statement of the chiefs shows a still greater preponderance in their favor.

The committee have preferred to take the statement of Dr. Wilson because he is the agent of the new government, and is in fact the individual who wields the whole machinery of that government at his will. Among the evils that have resulted from the new order of things it may be observed that the sage counsels of age and experience have been discarded from the Indian councils. The new subagent, who was nominated by the procurement of Wilson, is a very young man, who has been sued by the chiefs for trespassing upon the Indian lands, and who settled and compounded with them for the trespass. It is understood that he still runs a saw-mill that is mainly, if not wholly, supplied with timber cut from the Cattaraugus reservation. McLane, the president, is believed to be about twenty-six years of age, and with no pretensions to the talent or capacity to administer the governmnnt. The whole of the new government, or nearly so, is in the hands of the boys, and not the sages of the Senecas. Such it is believed has never before been the custom of their forefathers, and the aged and the wise among them are unwilling to submit to it.

It is a singular fact that of the whole number of youthful Indian sages that adopted the new constitution, or signed it afterwards, but four could write their names. And it is understood that but one or two at most of these four young men ever acted in the self-styled council that adopted it. What a learned convention to adopt *an English constitution—a republican government, and to overthrow the institutions and government of their fathers*. On the other hand the names of the eighteen chiefs and thirty warriors on the petition before the committee appear to have been written by themselves. This fact contributes to show upon which side the wisdom, the learning and talent among this people is arrayed.

Previous to the adoption of the new government, the chiefs had exercised a salutary restraint upon the whites, and prevented them from stripping the reservations of the valuable timber growing upon them. One of the great incentives to the attempt to overthrow the power of the chiefs, was to get rid of this restraint. The evidence of the great waste that has been committed under the new order of things has been presented to the committee, but the limits of this report forbid its introduction here. Abundant proof is also shown to us that drunkenness, the never failing attendant upon constant sales of Indian timber by individual Indians, has alarmingly increased. The Rev. Asher Bliss, missionary at the lower station, and secretary of the Seneca temperance society, writes thus: "Probably never within ten years, if indeed at any time since my connection with the Indians, has there been such fearful havoc among the people by that most deadly sin, intemperance." The writer here gives the particulars of eight Indian deaths by drunkenness since 1st January, 1849, and then closes as follows: "The other usual concomitants of drunkenness, such as lawsuits, fines, imprisonments, poverty, hunger, nakedness, quarrels, broken bones, broken hearts, wives fleeing from drunken husbands and mothers weeping over drunken sons, &c., have not been wanting."

The committee have been favored with a letter from the Hon. John C. Spencer upon the subject, which they beg leave to append to their report. The opinions of this able jurist and firm friend of the Senecas is entitled to great respect and consideration.

In no aspect of their case is the condition of the Seneca people improved by the overthrow of their ancient forms of government. Their sages and men of experience are no longer heard at the council fire. The boys of the tribe, fresh from the midnight wassail, are seated in power. It may be said, if the opposers of the new government are in the majority of the nation, they can elect officers from their own number. We answer, the chiefs and their friends will never submit to vote under the pretended constitution, until they are forced to do so. To do that would be to acknowledge the authority of the motley group that put forth that constitution. When the Legislature of New-York, *whose wards they are*, shall direct them to vote, they will do so, and not till then. They feel that the State is bound to protect the Seneca people in the full enjoyment of the rights and privileges they inherited from their ancestors, and which by many treaty stipulations have been guarantied to them.

Governed by chiefs during all past time, it is indeed wonderful that so little of complaint against their rules was even made by the Seneca people. It proves the wisdom, the sagacity and honesty of the chiefs, as well as the happy, contented and united condition of these Indians. By a revolution suddenly brought about by foreign agency, the whole aspect is changed. Where peace and contentment reigned, brother is warring with brother. Foreign interference here, as everywhere, arouses the "gorgon head" of strife and commotion. The two remaining reservations of their once vast possessions, are daily being stripped of the valuable timber which ought to be reserved for their use. Drunkenness, vice and debauchery, rapidly spread among this fated race. The hands that used to be raised to stay the ravages of the spoiler are palsied by the power that promised protection. The Seneca chief, once strong, has become weak with his people, and powerless in the land of his fathers.

The undersigned believing that the Seneca people have a righ to choose their own form of government, and to retain that which has been handed down to them from former generations, if they desire it, have directed their chairman to bring in a bill to submit the question to them. This much we feel the State is bound to accord to them. Let the will of the nation be fairly expressed, and when so expressed it is to be hoped that all concerned will submit to the decision, and that peace and tranquility will be once more restored to this last remnant of the Iroquois, now remaining among us.

All of which is respectfully submitted.

ROBERT OWEN, Jr.,
GEO. R. BABCOCK.

In signing the above report, the undersigned deems it his duty to state that while he concurs in its general object and in recommending the passage of the bill therein mentioned, he has no personal knowledge of some of the statements therein contained. His duties upon the judiciary committee prevented his attendance upon the committee on Indian affairs, during the hearing that was given to the Indians upon this subject, except upon two occasions. He has, therefore, been compelled to take the statements of others to a great extent, as to the facts proved or alleged before the committee.

GEO. R. BABCOCK.

(Copy.)

ALBANY, *March* 1, 1850.

Messrs OWEN, DART and BABCOCK,

Members of the Committee of the Senate on Indian affairs:

GENTLEMEN,—I have been requested by those representing the chiefs of the Seneca Nation of Indians, to communicate to you what information I have respecting the recent laws in relation those Indians. At the instance of a large number of chiefs and other Indians, and of a committee of friends who had taken charge of their concerns, I drew the act, chap. 150 of the laws of 1845. It was then agreed and understood by all parties and persons, that the Senecas were not ripe for self-government, and that it would necessarily be a work of time to bring them to such a degree of intelligence and civilization as would fit them for our system. The chiefs, although not educated, were sober, discreet men, of great experience, who had already attained their stations by election, and it was the conclusion of all the friends of the Senecas that the most judicious course would be to accustom them gradually to self-government, and that this could be best accomplished by vesting the government in their own chiefs. The above act of 1845 was drawn upon that plan and for that purpose. This act, as I understood, gave great satisfaction; and as was anticipated, in 1847 a desire was felt for a further extension of the principle. Accordingly, at the instance of the same classes of persons, I drew the act, chap. 365 of 1847, giving to the male Indians of 21 years of age, the right of choosing a clerk and treasurer for the Nation, and three peace-makers, and a marshal for each reservation. By this act the judicial functions were vested in the elective officers, and the national funds were placed in charge of an elected treasurer; while the general legislative powers remained with the chiefs, together with the very important powers of regulating the division and use of their common lands, and particularly of preventing the waste and destruction of their timber. This last power, as I understand and believe, presents the true point in controversy. So long as the power of prevention of such waste and destruction remained with the chiefs, the chances of the white men to plunder and strip the land of its timber were very small, and I was informed from reliable sources that the check thus provided was so effectual as to stir up the whites in the vicinity, and the individual Indians who were willing, for trifling considerations, to permit their names to be used to authorize the cutting down of timber, to vigorous efforts to repeal the obnoxious provisions. This could not well be accomplished by a direct effort, and hence a total change in the government was proposed, so as to render elective the guardian of the public property, and thus secure a more compliant set of officers. The new constitution, as it was called, was the consequence. The same malign influences which had prevailed so far, succeeded here in the Legislature in procuring a recognition of the constitution.

The consequence practically has been, that under the sanction of the new councillors elected under the new constitution, the most extensive depredations have been made upon the trees and timber of the nation. The pecuniary temptations offered to individual Indians and officers for permission to cut timber or strip bark, have but afforded the means for more extensive intemperance than was before known among the Indians for years.

Now, nothing can be more evident than the inevitable result of the destruction of the timber on the reservations. The Indians cannot advance in agriculture without houses, barns and fences, and they will not only be thus arrested in their career of civilization, but will be soon driven to abandon their possessions.

This I believe to be a fair and just account of the actual condition of things among them. I know not whether there is intelligence and integrity enough among them to resist the temptations held out under the present state of things; but the chiefs wish to make the experiment. They say that the law of 1849, recognizing the new government, was passed not only in entire ignorance or great mistake of its true bearing and of the policy necessary to be formed, but was a surprise upon their people; and that the great body of the sober, thoughtful and considerate among them, are utterly opposed to the new system, and prefer the mixed one which prevailed before. At their request I have drafted a bill to test this question, which I think is not only fair and just, but demanded by a regard to the well being of these remnants of the aborigines, who are now so few, so poor and so weak, as to challenge our best sympathies in their behalf and induce the utmost care in preserving what little remains to them.

Very respectfully,
Your obedient servant,
J. C. SPENCER.

State of New-York.

No. 109.

IN SENATE, APRIL 6, 1850.

REPORT

Of the committee on claims on the act for the settlement of the claims of Stiles Johnson, and Norman Butler.

Mr. Schoonmaker from the committee on claims to which was referred the engrossed bill from the Assembly, entitled " An act to provide for the equitable settlement of the claims of Stiles Johnson, and Norman Butler, on their canal contracts,"

REPORTS:

That the committee have had the same under consideration and find that the bill is to procure the settlement of the claims of Johnson and Butler against the State arising out of their contracts with the Canal Commissioners for the construction of the Myers creek aqueduct, Fulmer creek aqueduct, and lock number 43, and the section work connected with each on the Erie canal enlargement.

The bill proposes to have the claim settled and adjudicated by referees to be appointed by the supreme court in the fifth judicial district, thus constituting a new and independent tribunal for this special case, to do that which the existing authorities have now full power to do.

The contracts under which the work was done provide for a reference in relation to certain matters, the referees to be selected by the parties. These provisions in other contracts have been repudiated, your committee understand, as not authorized by law. But under these contracts they were not repudiated, but the references provided for in the contract have been held and awards made therein. By this bill, Johnson and Butler now desire to have a new reference created to consider and adjudicate matters which the other referees had no authority under the contract to hear and determine.

The Canal Board have now full power and authority to settle and adjudicate the whole claim. And your committee conceive that judicious legislation forbids such an infringement upon the settled policy of the State, as this case seeks to accomplish.

Your committee therefore recommend that the bill do not pass into a law.

State of New-York.

No. 110.

IN SENATE, APRIL 8, 1850.

REPORT

Of the committee on the internal affairs of towns and counties on the bill for the relief of Daniel Cornell and Ransom Clark.

The committee on the internal affairs of towns and counties, to which was referred the Assembly bill entitled, "An act for the relief of Daniel Cornell and Ransom Clark,"

REPORT:

That they have had the same under a careful examination, and that the subject is one of great importance, not only to the parties directly interested, but in view of the principles involved.

Your committee are free to admit that if the representations made by those who favor the passage of the law granting the relief asked for, were sustained by the facts in the case, would appear that the claim was equitable, and meritorious. But from a careful investigation of the whole subject, we find the following state of facts.

Prior to the year 1836, the Oxford and Butternuts turnpike company constructed a turnpike road through the town of Guilford, and in doing so used a certain portion of a road and bridge which had been used by the town as a public highway. That pursuant to statute said company erected a toll gate on said turnpike. That at the annual town meeting in 1836, a resolution was offered in behalf of this company, to the effect that the town would release to the turnpike company their right in said road and bridge. The said resolution was opposed by one of the claimants in the bill, and the resolution to release was so amended as to read as follows:

"*Resolved*, That the town of Guilford will not release to the Oxford and Butternntts Turnpike Company any portion of their road or bridge at Mt. Upton."

It appears to us, from a careful examination of this whole matter, that this is the only action which the town, in its corporate capacity, ever had against this company; and your committee have searched in vain for any evidence showing that the town of Guilford were injured by this company, or ever felt itself aggrieved by its acts.

And your committee would state in this connexion, that satisfactory evidence has been given that Ransom Clark is but little if any more than a nominal claimant in this bill.

It further appears that Daniel Cornell, in 1836, or early in 1837, passed the toll gate erected upon this road, by force, breaking the same, contrary to law.

That thereupon the turnpike company sued the said Cornell, and he was compelled to respond in damages to this company for this act of running the gate without paying toll.

That after the final termination of this controversy with the company, in which he had been subjected to fine and costs, said Cornell, in connexion with Ransom Clark, being commissioners of highways of the town of Guilford, sued the said turnpike company for the occupancy of the aforesaid road and bridge. That in this controversy said Cornell and Clark were finally defeated, and subjected to costs and expenses, which was paid by one of the claimants, Daniel Cornell.

That in 1841, said Cornell presented a claim against the town of Guilford for the costs and expenses incurred as above stated, which the board of town officers refused to audit and allow. That at the annual town meeting in 1842, the subject was brought before the town, and a resolution was passed directing the board of town auditors *not* to allow said claim, on the ground as they alleged that said suit was commenced against this turnpike company and the costs were incurred without their consent or authority. That soon after said Cornell made a motion to the supreme court for a mandamus to compel said board of town auditors to audit and allow said claim. A large amount of testimony was taken on both sides, and it appeared to us that all the facts in the case were fully shown and all the points involved that ever have been, and after a full examination of the case the motion was denied with costs.

It next appears that said Cornell and Clark brought a suit in the supreme court against the town for this claim, and for the convenience of the parties they agreed to refer the same to referees which reference was held in Oxford, and the testimony taken, and the decision of the referees was in favor of the claimants upon legal decisions made by said referees in which all the points made by the town were overruled by them.

From this decision of the referees the town of Guilford appealed to the Supreme Court, and upon a full examination of all the testimony taken before the said referees, and of all the legal points involved after hearing the arguments on both sides the Supreme Court set aside the report of the referees with costs.

That thereupon the said Cornell & Clark carried the cause to the Court for the Correction of Errors. That the cause was argued by able counsel on both sides, in 1846, upon all the points involved, both legal and equitable, and decided in favor of the town by the vote of 10 to 4.

Your committee deem it proper to advert to the testimony, and the grounds upon which this claim is sought to be maintained. It is alleged that a town meeting, in 1836, at the close of the meeting when the aforesaid resolution not to release was passed, that another was also passed authorising the commissioners of highways of said town to sue this company.

But from a careful examination of all the testimony upon this point we have come to the unanimous conclusion that no such resolution was passed by the electors of that town.

It is true that some 12 or 15 persons testified before the referees from recollection, after the lapse of seven years, that at the very close of the meeting they voted for such a resolution. And it also appears, from the testimony of double that number, that they were at the meeting from the passage of the resolution not to release until meeting adjourned, and were paying good attention, and heard no such resolution spoken of, and from the fact that the original minutes of this meeting and the town book of records show no such resolution, and from the testimony, also, of a majority of the officers of said meeting, including the town clerk, who testifies that he kept true and correct minutes, and that they were correctly transcribed into the town book of records, and that no such resolution could have passed without their knowledge, your committee have come to the conclusion that none was passed.

But as this claim is urged upon the ground of equity, solely, your committee deem it proper to state that the supreme court have expressly decided in this very case that "*conceding*" that a majority of the electors of Guilford had passed the resolution as claimed; that the same could have no binding force on the minority or any one, for the reason that it is not within their "corporate" or statutory powers, and would be (to use their own language) a mere "nullity." If then a majority of all the electors in town cannot by passing such a resolution, legally bind the taxable inhabitants, it is clear to your committee that the small number of 12 or 15 voters cannot from design or otherwise pass any resolution that will be equitably binding on 600, and subject them to an onerous tax for an unjustifiable controversy to gratify the feelings of one man.

It also appears that Cornell examined the town book of records, and found no authority there given before he brought the suit against the company.

It further appears clearly in the testimony before your committee, that said Cornell had had difficulty with this turnpike company, and possessed very angry feelings towards them, threatening to break them down and rip up their gate, and threatened to sue them in case the company should beat him in his suit for moving their gate. The conclusion is therefore irresistable that he brought the suit to gratify his own feelings, and not for the interest of the town of Guilford.

It does appear to your committee that this same matter having been four several times fully examined and decided, and that too by the highest judicial tribunals in our State, that the matters involved ought to be considered as settled.

Your committee have searched in vain for a precedent for such an act of legislation as is proposed by this bill, where the same matter has been directly litigated between the same parties, and uniformly decided the same way, and we cannot believe in the policy of reversing such high legal decisions upon petition only.

It also appears to us in proof that several of the most important papers which have been previously placed on file, and in the hands of committees of the Assembly by the town's agents, have been abstracted therefrom by some person or persons to your committee unknown.

Your committee have come to the conclusion that the evidence in the case clearly establishes the following facts:

1st. That the town of Guilford was not injured, and did not feel itself aggrieved by the acts of this turnpike company in constructing a turnpike through their town.

2nd. That they therefore had no motive to, and did not authorise the institution of this suit, or pass any resolution to that effect at their town meeting in 1836.

3rd. That Daniel Cornell commenced this suit against the turnpike company with a full knowledge of the foregoing facts.

Your committee have, therefore, come to the conclusion that said Cornell commenced the suit against the Oxford and Butternuts Turnpike Company without authority from the town, and in bad faith, and that it would be unjust and oppressive to compel the taxable inhabitants of the town of Guilford to pay him for his own wrong.

Your committee, in view of all the facts in the case, recommend the adoption of the following resolution:

Resolved, That the bill from the Assembly, entitled An act for the relief of Daniel Cornell and Ransom Clark, ought not to pass.

CHAS. COLT,
JOHN NOYES,
LEVI DIMMICK.

State of New-York.

No. 111.

IN SENATE, APRIL 9, 1850.

REPORT

Of a majority of the committee on Literature on "a bill to provide for the support of Common Schools."

Mr. Beekman, from a majority of the committee on literature to which was referred the engrossed bill from the Assembly entitled an act to provide for the support of common schools,

REPORT,

That after carefully considering the provisions of the act submitted to them, they have come to the conclusion that it ought not to become a law for the following reasons.

The Assembly bill proposes to repeal the free school law absolutely, by repealing in § 7 chapters 140 and 404 of the Session Laws of 1849, and by restoring and reviving all laws repealed by said chapters 140 and 404.

That a measure deliberately adopted by the suffrages of the people of this State, at a popular election in which fifty-five counties voted aye, and but four counties voted no, and the clear majority in its favor was no less than one hundred and fifty-eight thousand, should be quietly repealed by a subordinate section of a law bearing another title, is certainly rather hasty, and perhaps unconstitutional legislation.

The free school law of 1849, has not worked equally well in all parts of the State. From the 11,000 school districts, some three hundred petitions have come up to the Legislature praying amendment or repeal. Nineteen twentieths of the school districts have sent no petitions, and eight-tenths have made no complaint even by letter, on any subject whatever.

The committee on literature, early in the session, after a full conference with the department of common schools, in the office of the Secretary of State, reported certain amendments, which were, after some debate, laid over until the lapse of time rendered new amendments necessary. Those were made and duly reported on the 1st March. (Senate Bill No. 156.) But a bill introduced on notice by Senator Mann, on the 2d March, (No. 161,) entitled "an act to submit to the people at the next annual election the question of the repeal of the act establishing free schools throughout the State," found more favor with the Senate, and finally passed that body.

This measure proposed no amendments; submitted the imperfect free school law of 1849 with all those defects which experience had developed, untouched, to the popular vote; and it would almost seem with the purpose of defeating the law by aid of the disgust felt for one or two of its subordinate clauses.

The Assembly, however, has struck out an independent line of legislation on the subject of schools. It is now proposed to raise by tax eight hundred thousand dollars, and to pay over that sum when raised to the county treasurers, subject to the order of the State Superintendent of Common Schools. This officer is directed, on or before the first day of January in each year, to apportion and divide this $800,000 among the several school districts, parts of districts and neighborhood, in their several towns and wards, by dividing one-fourth of the whole amount of public money equally among the several districts. In towns where there are parts of districts and separate neighborhoods the distribution of the one-fourth to be made as follows: divide the one-fourth by the number of districts, parts of districts and separate neighborhoods, each whole district to be entitled to the sum so ascertained, and each part of district to be entitled to such proportion of such sum as the number of children between five and sixteen therein bears to the number in the part of the said district in the adjoining town, and each separate neighborhood to be entitled to such proportion of said sum as the number of children therein between said ages bears to the average number in the district in said town, and apportioning the remaining three-fourths in the mode now prescribed by law, and said moneys shall be applied exclusively to the payment of teachers' wages.

§ 5. Repeals so much of the Revised Statutes as requires supervisors to raise by tax on each town a sum equal to the amount of school money apportioned to such towns, and provides for its collection and payment, and all subsequent provisions of law incompatible with the act passed by the Assembly.

§ 8. Excepts from the operation of the act all special acts relating to schools in any of the incorporated cities or villages of this State, save only that all cities and villages shall be subject to the tax necessary to raise the sum of $800,000, mentioned in the first section of the bill.

No provision is made for the submission of this question to the people, as by Senator Mann's bill, and the Senate is called to pass absolutely upon the repeal of the free school law by simple enactment, after having just decided that they would not do so, but would refer the question again to the popular vote.

One of the most interesting questions that have been discussed in both Houses during the present session, has been the just and uniform assessment of property for the purpose of taxation. Although elaborate bills have been presented to the respective branches of the Legislature, no final action has been had in either; and it is probable that should this school bill become a law, the levy of $800,000 which it directs, will be carried out under the present unequal system of valuation.

All the cities in the State would, by its unjust operation, be compelled to raise several times as much school money as they could receive. While many counties would derive a large sum over and above what they would raise by taxation (in some cases several thousands) all which money would be drawn from the cities, villages or neighborhood, where capital happened to be accumulated. The effect of the measure upon the city of New-York is well set forth in the following statement, prepared by Hon. Mr. Waters, a member of the New-York delegation in Assembly.

Statement, showing the operation of Mr. Burroughs' school bill in the city and county of New-York.

The bill proposes to raise $800,000 by tax, apportioned among the several counties of the State in proportion to the assessed value of the real and personal estate therein.

By the last returns, the whole assessment of the State was, in round numbers,.......................... $665,000,000 00
And the assessment of the city and county of New-York was,................................ 254,000,000 00
or rather more than 38 per cent.

The city and county of New-York would therefore pay 38 per cent. of the $800,000 tax, or $304,000 00

The distribution of the proceeds of this tax is to be as follows, viz:

One-fourth, according to the number of school districts; each district, large or small, receiving an equal proportion.

Three-fourths, according to the number of scholars, being the ratio adopted in the distribution of the school fund.

The whole State contains upwards of.......... 11,000 districts.
The city and county of New-York,........... 194 do
or about one-sixtieth of the number.

But on reference to the distribution of school moneys, last year, it will be seen that the city and county of New-York have rather more than one-seventh of the scholars.

It follows that the districts in the city average more than eight times as many scholars as the districts in the country, and yet are to receive the same amount only of the first distribution.

This amount will be one-sixtieth of $200,000, or, in round numbers, to make allowance for fractions, ... $3,500 00
The remaining $600,000 will be divided in proportion to the number of scholars, of which New-York has 14 per cent., making 84,000 00

Total amount returned to the city and co. of N. Y., $87,500 00

The city and county of New-York thus pays,.....	$304,000 00
And receives, ...	87,000 00
Leaving a balance, contributed by her to the support of schools in the country, from which she receives no benefit whatever,..............................	$216,500 00

It will also be borne in mind, that in the country a lot can be purchased and a school-house built for from $500 to $,1000; while in New-York the cost ranges from $25,000 to $40,000.

That the same teacher can be had in the country for $200 a year, who in the city would command $700—a difference owing chiefly to the increased cost of living.

It is not, therefore, out of the way to say, that it costs from three to four times as much to educate a child in New-York city as in the country, and therefore to make the distribution equal and fair, the whole amount raised by the city, should be expended there; or in other words, the city should be exempted from the operation of the law.

The city expended last year for schools,...		$376,000
The amount to be raised by this bill,......	$304,000	
Add her share of school fund, say.........	41,000	345,000
Deducting this leaves a balance of.....		$31,000

Showing that the whole moneys raised under this bill, with the school moneys added, will be $31,000 less than the actual expenditures of last year.

Further, it is to be remembered that the rate of assessment is vastly greater in the city than in the country. An additional objection to the bill is, that it leaves in force all the local laws imposing special taxes on the cities and villages for school purposes.

New-York city, by local law, is compelled to raise,

1. The amount of school money distributed,............	$41,000
2. One-twentieth of one per cent......................	127,000
Add the amount levied by this bill,....................	304,000
Making a fixed yearly tax of.........................	$472,000

Now deduct from this the amount which goes to the country exclusively,	216,500
Leaves for New-York city,	$255,500
But the amount expended last year was	$376,000
Deduct the above amount,	255,500
Leaves	$120,500
Which the city must raise in addition, in order to maintain her schools in the same condition as last year, add	
Fixed yearly taxes above,	472,000
Annual burden on the city of New-York,	$592,500

from $216,500 of which she receives no benefit, and from the residue about one-fourth of the benefit which the country gets from the same amount. One effect, as Mr. Waters shows, will be to compel the city of New-York to raise very nearly $600,000 in order to sustain its present schools, for which they now pay $376,000; leaving a nett contribution towards the support of country schools of $216,500.

The same objection will be raised by every city in the State.

By passing this bill, counties which received more than they contributed, would have a direct interest in preventing any change in the present laws of assessment for taxation. What is now difficult might then be impossible; and the discontent of the people might take a direction against the sacred cause of education, for whose sake the detested tax was levied

Grave objections exist to a school system in which the residents of districts and neighborhoods have nothing to do with self-taxation. Town-meetings are time-honored auxiliaries of freedom. Your committee, in recommending town taxation and district taxation in certain cases, expressly desired to keep alive a local interest in each particular school.

"The school system of New-York," says Mr. Flagg, then Superintendent, "has been formed by combining the advantages of the different plans of supporting common schools, which prevail in the New England states. Our system happily combines the principles of a state fund and a town tax. Enough is apportioned from the

State treasury to invite and encourage the cöoperation of districts and towns; and not so much as to induce the inhabitants to believe that they have nothing more to do than to hire a teacher to absorb the public money.

The free school law of 1849 was aimed against rate-bills. It obliged districts to tax themselves heavily and as has been found, unequally. The amendments twice submitted by this committee were intended to equalize this taxation, and by throwing the weight of it upon the towns, to take away many of the causes of discontent. The Assembly bill, however, now under consideration, aims to support schools by a general tax to a limited extent, while it retains the rate bill to make up the deficiency, and unconditionally repeals the Free School Law of 1849, and all other statutes which are inconsistent with the act proposed, thus accomplishing no good thing for education while enforcing upon a grand scale the very same unequal taxation which is made the chief ground of complaint against the present law.

Districts now pay unequal portions of school money. This bill arrays *counties* against each other, and bribes those counties which contain no cities or villages to persist in injustice towards their neighbors. Your committee therefore intercede once more for the preservation of the Free Schools, and recommend that the Assembly bill now reported, be not passed by the Senate.

All which is respectfully submitted.

JAMES W. BEEKMAN,
SAMUEL MILLER.

Albany April 9, 1850.

State of New-York.

No. 112.

IN SENATE, APRIL 5, 1850.

REPORT

Of the judiciary committee on the bill to prohibit corporations from interposing the defence of usury in any action.

The judiciary committee to which was referred the Assembly bill, entitled "An act to prohibit corporations from interposing the defence of usury in any action,"

REPORT:

That they had the same under consideration, and have come to a conclusion to submit the bill for the consideration of the Senate. There is a diversity of opinion in the committee upon the proposed bill. A majority of the committee are not at this time disposed to express any dissent to the provisions or principles of the bill. The undersigned, however, deemed it not inappropriate to call the attention of senators to its provisions, and briefly to state some considerations which will prevent him from favoring its passage.

The bill, although short, is of a comprehensive character. The first section enacts that "no corporation shall hereafter interpose the defence of usury in any action." The second section declares that the term corporation as used in this act, shall be construed to include all associations and joint stock companies having any of the powers and privileges of corporations not possessed by individuals or partnerships; and the third section repeals the provisions of any statute inconsistent with the first section of the act.

It may be well to remark that it is generally understood that this bill had its origin in the wide-spread indignation of the commercial community at the New-York Dry Dock Bank, which had recently by a decision of the Court of Appeals, avoided the payment of a very large amount of its obligations by availing itself of the provisions of the statute against usury. The undersigned is not disposed to justify fraud or bad faith in any one; yet in reference to this case he is of the opinion that however creditable to the community its condemnation may be, it does not of itself furnish conclusive reasons for legislation of a character so radical as that proposed by this bill. That "hard cases make bad precedents," has become an axiom among jurists, and it is as true in the halls of legislation as upon the bench. The legislative enactment or judicial decision which is aimed at wrong in a particular instance, often involves principles which vitally affect society at large, and reach persons and cases of a very different character from those originally designed for its operation.

It is equally well understood that the passage of this bill is pressed by a class of corporations desirous of borrowing money at rates of interest beyond those recognized as legal,. and by capitalists who have dealt with and now hold, or who wish hereafter to deal with a class of securities respecting which there exists a vague and uneasy suspicion of illegality which this bill is designed to remove. It is not the purpose of the undersigned to enter into any discussion of the policy of repealing the laws for the prevention of usury. The bill before us purports to have a partial and limited effect, and such it was doubtless designed to have; yet it is with deference suggested that the third section is more comprehensive in its scope than is apparent upon a cursory reading. The statute against usury allows defendants generally to "interpose the defence of usury." Corporations are not expressly named; they have no rights or disabilities different from persons. This statute and its provisions are inconsistent with the provisions of the first section of this act, and are therefore expressly repealed by the third section. Will not this operate as a total repeal of usury laws? If this bill is to become a law, as seems highly probable, the undersigned suggests that the third section should be amended so as to remove all doubt as to the extent of its operation. If it will bear or is designed to receive the construction which is above suggested, it is better to reach the object directly, and by a bill which shall express, in its title, its real character.

So far as the bill is designed to affect securities already in existence, it is respectfully submitted that it must fail; or if the question of power is conceded the policy and justice of its exercise is at least questionable. The bill does not, upon its face, purport to be retrospective, yet it is notorious that its advocates urge its passage in the professed expectation that it will extend to the past as well as to future transactions. If any corporation has outstanding an usurious security, the law as it now stands declares it to be absolutely void, not voidable merely. Its character is fixed. It is, in law, as if it were not. Is it in the power of the Legislature to give it vitality ? If it has such power, is it expedient to exercise it ? The right of the corporation to "interpose the defence of usury" in an action upon it is vested ; can or ought the Legislature to take away that right ? To do so may not be a violation of that clause of the Constitution which prohibits a State from passing laws to impair the obligation of contracts ; for, literally, it does not impair the obligation of a contract, but it seeks to do practically what is perhaps equally productive of evils; to make a contract between parties without their concurrence in a case where previously none, in the eye of the law, existed. This may be within the power of a State, but should such a power be ever exercised ? Besides, there is given an action to recover back the usurious interest, and to have the contract or instrument purporting to be a contract formally cancelled and all prosecutions thereof enjoined by the courts. These remedies are more obviously within the reach of legislative repeal ; but as they were not given in respect to transactions prior to the passage of the law, is it just to withhold them in respect to those entered into after the law took effect ? The statute wisely left past contracts to the remedies existing at the time of its passage, and to establish now a new rule would violate the harmony which should attend all legislation upon the business transactions of the community.

Conceding that these suggestions are not well founded, or that the bill is intended to have no retrospective effect, the question arises, is it expedient to enact it into a law of the State ? In the opinion of the undersigned it is clearly inexpedient. The law will be productive of great evils to both persons and corporations, and the benefits expected from it will fail to be realized, except, perhaps, in a few isolated cases.

This opinion is held in opposition to that of many persons for whose judgment, integrity and sagacity, the highest respect is entertained. It is advanced against a weight of authority well calculated to inspire diffidence, yet, being sincerely entertained, duty forbids its suppression.

No adequate reason appears for depriving a corporation or a legal aggregation of persons of rights and defences which are retained, for reasons of public policy, to individuals or partnerships, however numerous the persons composing the latter may be. If the measure is designed to favor corporations and joint stock companies, and to give them advantages not now possessed, it is still more objectionable and contrary to public policy. In either view it is *special* and *partial* legislation, and, in the opinion of the undersigned, impolitic and hurtful.

One of the consequences apprehended from the passage of this bill is, that corporations will, as borrowers, have the control of the money market to a great extent, in times of a scarcity of money. The law will allow them to offer a rate for its use which is denied to individuals. The lender is allowed to take but seven per cent of the merchant; of a corporation he can take ten or more. The security being equal, or nearly so, can there be a doubt that the corporation will be preferred, to the exclusion of the individual? No matter how willing the merchant may be to pay the highest rate, he is virtually excluded, because the law gives no assurance to the lender that he is safe against the "defence of usury;" while in dealing with a corporation at the same, or even at a higher rate, he has the guaranty of this statute that no such plea shall be interposed. The sufficiency of the security therefore becomes the sole inquiry, if more than seven per cent is offered by the corporation. The merchant is excluded from the field, however ample his security, or however willing he may be to pay more than the legal rate. It is well known that the bonds or securities of corporations are constantly in the market to very large amounts, even when money is abundant. In times of commercial embarassment, such as existed but a few years ago, corporations are frequently large borrowers from capitalists. Now, they meet individuals in the money-market upon equal terms. Pass this bill, and let a similar state of pecuniary distress ensue, and your banks, insurance companies, railroad companies, steamship, manufacturing, plankroad and turnpike companies, and the many other descriptions of corporations throughout the land, will sweep away the hoardings of the money-lender, to the exclusion and ruin of thousands of merchants and mechanics, who but for this law would be enabled safely to ride out the storm. It is no answer to this objection to say, that the individual can and will agree to pay the same rate as the corporation. The law furnishes an endorsement of the contract of the corporation which it denies to that of the individual, and the capitalist will prefer the former. It is not necessary to enlarge upon this point. If it is not apparent upon the bare statement, no argument however extended, can make it so.

Another result to be apprehended from the passage of this bill is, an undue extension of the business of corporations. Our people are enterprising and sanguine. They embark in schemes readily, and are too often misled by vague calculations of profit. It is not necessary to point to the hundreds of corporations whose original stock is nearly or quite lost before the several objects of their creation are attained, and who have borrowed as long as borrowing was possible. These loans take precedence of the claims of stockholders, and the latter are often sacrificed by the facility with which scheming and plausible managers can effect loans. Works are undertaken with a small portion only of the capital stock subscribed which is necessary for their completion. Enterprising and confiding men subscribe to the stock, and when this resource is exhausted the enquiry is at once made, what are the borrowing powers of the company? If a sufficient amount of capital has been expended upon the work to satisfy the caution or cupidity of the lender, in the way of security, the loan is effected—the lender of course taking precedence of the stockholder, and thenceforward the work is carried on solely by loans: the value of the stock being so far depreciated as to render farther subscriptions impossible. It is needless to add, that in most cases the work becomes, practically, the property of the lender; its managers being mere trustees to conduct its business and pay over the earnings to meet the interest of its indebtedness,

Under the operation of this bill these evils must be greatly aggravated. As long as there is any vitality left in a corporation, and a plausible excuse for going forward exists, it will borrow at some rate of interest, and the higher the rate the sooner are the stockholders stripped of their property. Is it wise or just, by special legislation, to facilitate such results?

Another effect to be apprehended from this bill becoming a law is, it will induce capitalists to refuse to embark in meritorious public enterprizes as original stockholders. They will prefer to become lenders at large rates of interest rather than to incur the hazards of a stockholder, or to take the less tempting reward of dividends for the use of their capital. Consequently they will not become subscribers, and their capital will receive, by law, a protection as well as a profit, which is not accorded to the more public-spirited and less wealthy projectors and friends of many enterprizes designed to develope the resources, increase the wealth and add to the glory of the State.

There are many other objections, in the view of the undersigned, to the passage of the bill; but sufficient has been said to call the serious attention of Senators to the subject, and, that accomplished, its fate is left to their decision.

GEO. R. BABCOCK.

SIXTY THIRD ANNUAL REPORT

OF THE

REGENTS OF THE UNIVERSITY

OF THE

STATE OF NEW-YORK.

Made to the Legislature, March 1, 1850.

ALBANY:
WEED, PARSONS & Co., PUBLIC PRINTERS.
1850.

State of New-York.

No. 113.

IN SENATE, MARCH 1, 1850.

ANNUAL REPORT

Of the Regents of the University.

To the Hon. George W. Patterson,
Lieut. Governor and President of the Senate:

Sir—I have the honor to transmit the Annual Report of the Regents of the University.

I remain, very respectfully,
G. Y. LANSING,
Chancellor.

The following gentlemen composed the Board of Regents of the University, at the time of making the report herewith published. The dates of their appointment are prefixed to their names.

The GOVERNOR, ex officio.
The LIEUT. GOVERNOR, ex officio.
The SECRETARY OF STATE, ex officio.

1825,	January	12,	JOHN GREIG.
1826,	January	26,	GULIAN C. VERPLANCK, LL. D.
1829,	March	31,	GERRIT Y. LANSING.
1829,	March	31,	JOHN K. PAIGE.
1833,	February	5,	ERASTUS CORNING.
1833,	April	4,	PROSPER M. WETMORE.
1834,	April	17,	JOHN [illegible]. GRAHAM.
1835,	April	8,	JOHN McLEAN.
1842,	February	1,	GIDEON HAWLEY, LL. D.
1842,	March	24,	DAVID BUEL.
1844,	May	4,	JAMES S. WADSWORTH.
1844,	May	4,	JOHN V. L. PRUYN.
1845,	May	10,	JABEZ D. HAMMOND, LL. D.
1846,	February	2,	JOHN L. O'SULLIVAN.
1846,	February	2,	ROBERT CAMPBELL.
1847,	May	6,	Rev. SAMUEL LUCKEY, D. D.
1847,	Septem'r	22,	ROBERT G. RANKIN.
1849,	February	6,	PHILIP S. VAN RENSSELAER.

(One vacancy.)

OFFICERS OF THE BOARD.

GERRIT Y. LANSING, *Chancellor.*
JOHN GREIG, *Vice-Chancellor.*
T. ROMEYN BECK, *Secretary.*

Mr. Hawley, the Governor, the Secretary of State, Mr. Hammond and Mr. Corning, were the committee to prepare the Annual Report.

TO THE LEGISLATURE OF THE STATE OF NEW-YORK.

The Regents of the University in compliance with the duty required of them by law, respectfully present this, their

SIXTY-THIRD ANNUAL REPORT.

They have received reports during their present session from ten colleges, and one hundred sixty-one academies.

I. COLLEGES.

Reports have been received from Columbia College, Union College, Hamilton College, Geneva College and its Medical Institution, the University of the City of New-York and its Medical Department, Madison University, St. John's College at Fordham, the College of Physicians and Surgeons in the city of New-York, Albany Medical College, and the Medical Department of the University of Buffalo.

All these are herewith transmitted, with tabular statements showing the condition of the respective institutions, under the divisions of literary and medical education.

The aggregate number of students in general literature and science, in the colleges reporting during the collegiate year (which in these institutions ends at various periods, from July to October 1849,) was 948, being a less number than that reported in 1849, by 32. The number of Medical Students in attendance was 848, being an increase of four on the number reported last year.

The comparative condition of these departments during the last three years will be seen below.

	Literary Colleges.	Medical Colleges.	Total.
Reported in 1848,	957	769	1,726
do 1849,	980	844	1,824
do 1850,	948	848	1,796

II. ACADEMIES.

The whole number of Academies at the date of this report subject to the visitation of the Regents, including the Grammar Schools attached to Columbia College and to the University of the city of New-York, and the Institution for the instruction of the Deaf and Dumb, is 196.

The number reported by the Regents at the date of their last annual report, was 188.

They have incorporated since the 1st of March, 1849, the following:

1. *Windsor Academy* at Windsor, in the county of Broome, on the 15th March, 1849.

2. *Sauquoit Academy* at Sauquoit in the county of Oneida on the 6th of April, 1849.

3. *Brownville Female Seminary* at Brownville in the county of Jefferson on the 10th of January, 1850.

4. *Prattsville Academy* at Prattsville in the county of Greene on the 31st of January, 1850.

5. *Hubbardsville Academy* at Hubbard's Corners in the town of Hamilton and county of Madison on the 14th of February, 1850.

The following academies, incorporated by the Legislature have either placed themselves under the visitation of the Regents, or made the necessary reports required by their acts of incorporation:

1. *Rome Academy* at Rome in the county of Oneida, incorporated January 28, 1848. Received March 15, 1849.

2. *Liberty Normal Institute* at Liberty, in the county of Sullivan, incorporated April 10, 1849. Received September 20, 1849.

3. *New-York Free Academy* at New-York, incorporated May 7, 1847. Received October 31, 1849.

The number of academies, that have reported, is 161. Of these however, Bethany Academy only states its financial condition. The usual course of instruction will shortly be resumed in it.

The following have not reported:

1. Astoria Institute.
2. Avon Academy.
3. Batavia Female Academy.
4. Bridgewater Academy.
5. Brownville Female Seminary, (just incorporated.)
6. Clarkson Academy.
7. Clermont Academy.
8. De Lancey Institute.
9. Essex County Academy.
10. Fonda Academy.
11. Gaines Academy.
12. Hempstead Seminary.
13. Herkimer Academy.
14. Knoxville Academy.
15. Lancaster Academy.
16. Lewiston Academy.
17. Mendon Academy.
18. Moriah Academy.
19. Oyster Bay Academy.
20. Palmyra High School.
21. Perry Centre Institute.
22. Piermont Academy.
23. Poughkeepsie Classical School.
24. Redhook Academy.
25. Ridgeway Academy.
26. Schenectady Academy.
27. Schenectady Young Ladies Seminary.
28. Steuben Academy.
29. Sullivan County Academy.
30. Syracuse Academy.
31. Waterford Academy.
32. Waterloo Academy.
33. Westtown Academy.
34. White Plains Academy.
35. Yates County Academy and Female Seminary.

Of the above, Palmyra High School, is reported by a committee of visitation on the part of the Regents, to be extinct. It will accordingly be hereafter left from the list. There are doubtless several more in a similar condition, but the Regents have as yet no official information to that effect.

Numerous schedules have been prepared, as in former years, to present a full view of the relative progress and condition of all the academies reporting.

Number one contains a list of all the academies reporting, arranged in alphabetical order, with the cities, towns or incorporated villages and counties in which they are situated. To this is added, on the suggestion of a professor in one of our colleges, the names of the principals of the respective institutions during the year comprised within the Annual Report. The Regents do not doubt but that this addition will be deemed an important improvement.

Number two exhibits the whole number of students in the respective academies, at the dates of their annual reports, and which are required to be the conclusion of the term or quarter nearest to the first of January in each year, and also the whole number taught during the year or part of the year, ending on the day just mentioned. The same schedule also contains the number claimed by the academies and allowed by the Regents to be classical scholars, or students in the higher branches of English education, as defined by statute. Distinct columns for the number of male and female scholars respectively claimed, are also given. They stand as follows for the three last years.

	Males.	Females.
In 1848,	7,007	6,923
In 1849,	7,356	7,759
In 1850, (present report,)	8,205	8,348

The average age of the students claimed, whenever it has been returned by the Academy, will be found in a column in the same table.

The following abstract shows the result obtained in the present schedule, compared with those of the two preceding years:

	Whole No. attending during the year.	No. attending at the date of the reports.	Claimed.	Allowed.
1848,	25,838	13,058	14,282	14,262
1849,	27,077	13,888	15,115	15,043
1850,	28,941	14,925	16,553	16,514

Numbers three and four contain tabular statements of the relative condition of the academies, as to their permanent endowments and other funds, their annual revenues and expenditures, together with the debts due by them. The total amount of fixed capital in lots, buildings, libraries, philosophical apparatus and in other property set apart for their support, was

In 1848, reported as,	$1,466,760
In 1849,	1,467,061
And the present year 1850,	1,606,064

The debts chargeable on the above investments have but slightly increased compared with the large additional investment of property.

They were in 1848,	$169,023
1849,	154,261
And in 1850,	154,740

The annual income derived from tuition fees and the amount paid as the salaries of teachers, for the last three years is also shown below:

	Tuition Fees.	Salaries of Teachers.
In 1848,	$215,949	$210,525
In 1849,	220,034	215,191
In 1850,	227,576	232,375

Number five contains a statement of the appropriations made by the Regents to various academies for the purchase of books and apparatus, pursuant to the provisions of the act of 1834, relative to the application and distribution of the revenue of the Literature Fund, and of the acts subsequently passed, containing a similar disposition. From this table it appears that up to the 1st of January, 1850, the sum of $39,461.95 has been granted by the Regents, and an equal amount raised by academies, making a total of $78,923.90.

Unfortunately, a disposition was becoming quite too common to delay the expenditures in question, and the Regents were induced from a sense of what was due to the liberality of the State, and indeed also to the best interests of the academies interested, to require that the sums raised and granted, should be expended within the year during which they were granted, or at least before the coming in of the next annual report. The result has met their fullest expectations. Of the large sum named above, the whole has been satisfactorily accounted for, except the following amounts

Prior to 1845,	$461 72
From 1845, to 1850,	$211 23
	$672 95

A smaller amount than has been reported for a number of years past.

Number six, contains a statement of the numbers of teachers and departments; of the periods when exercises in composition and declamation, or both are attended to, and also of the numbers gratuitously instructed in the several academies. It also presents, so far as it can be ascertained from the reports, the numbers of instructors in each academy, that have expressed an intention to make teaching their profession.

The number thus reported for the last three years, are as follows:

	No. of Teachers.	No. who intend to make it a profession.	Students gratuitously instructed.
1848, (156 academies,)	659	427	257
1849, (155 academies,)	667	473	243
1850, (160 academies,)	695	504	455

N. B. Of the above numbers, (455) 194 were instructed at the New-York Free Academy.

Number seven, contains abstracts of the prices charged for tuition in the elementary branches of english education, in the higher branches of the same, and lastly, in classical studies. To these, are added columns stating the price of board at each academy, and the number of volumes in its library. An additional column will also be found, indicating whether the "Natural History of New-York," as furnished by the Secretary of State, pursuant to provisions of law, remained in the Academy Library, and continued to be its property. The Regents were of opinion, that as a preference has been given by repeated enactments, to these institutions, in furnishing them with the work in question, they should at least not alienate it, and they are happy to perceive by the returns, that in most instances, this proves to be the fact.

The volumes in the libraries for the last three years, number as follows:

	No, Volumes	Average number.
In 1848, 153 academies reported,--------	63,365	414
In 1849, 154 do do --------	65,524	424
In 1850, 157 do do --------	66,442	423

Numbers eight and nine exhibit the subjects of study taught, and the class or text books used for that purpose

Number ten contains a few extracts from reports.

To these are subjoined abstracts of the returns of Meteorological Observations, made during the year 1849, and a few communications and extracts, relating to the science. Tho present will be the last return under the late system of observing, as through the liberality of the last Legislature, the Regents have been enabled to lay the ground work for a more accurate and more useful plan. Many circumstances have delayed its going into operation with the present year, but it is confidently expected that before midsummer, all the selected stations in the State, will be furnished with the necessary instruments, and the observations generally commenced. The details connected with this subject will, however, be shortly communicated to the Legislature, in a more specific manner.

The Legislature, by an act passed March 30, 1849, (Chap. 174,) in one of its sections, ordained as follows :

Section 2. The Treasurer shall pay on the warrant of the Comptroller, out of the income of the United States Deposit or Literature Fund, not otherwise appropriated, to the Trustees of one or more academies, as the Regents of the University shall designate in each county in this State, the sum of two hundred and fifty dollars, per year for the years 1850 and 1851 ; provided such academy or academies shall have instructed in the science of common school teaching, for at least four months during each of said years, at least twenty individuals, but no such one county shall receive a larger sum than two hundred and fifty dollars.

Under the provisions of this law, the Regents held a special meeting on the 9th of April, 1849, appointed a committee to designate and report the academies that should be selected for the above purpose and also to report the forms of proceeding to be required from said academies to entitle them to the appropriation.

The Regents agreed to meet early in the autumn to receive the above report and to make a selection of academies accordingly. Meanwhile public notice was given in the State paper of the above, with a list of academies already applying, and of the intention and proposed time of the future meeting.

On the 20th of September, 1849, the Regents accordingly met, and at which meeting the following were present.

The Chancellor,
The Governor,
The Lieut. Governor,
The Secretary of State,
Mr. Lansing,
Mr. Paige,
Mr. Corning,
Mr. Graham,
Mr. McLean,
Mr. Hawley,
Mr. Buel,
Mr. Pruyn,
Mr. Hammond,
Mr. Campbell,
Mr. Rankin,
Mr. Van Rensselaer.

The Secretary of State, from the above committee made the following report:

The committee appointed by the Regents in April last to receive and report on the applications that might be made by academies to be appointed to instruct Common School Teachers, in conformity to the provisions of the act passed March 30, 1849, and to designate the academies to be selected,

Report that they have received applications from 57 academies in 38 counties. (The list is omitted.)

On receiving the above list of applicants, the earliest subject for consideration and decision appeared to be whether the appropriation should be limited to a single academy in each county. There are many reasons why, in the view of the committee, this course should be preferred. If the number of students to be educated, equally with the amount of money to be granted, be subdivided, there is much reason to apprehend that the object to be attained will be altogether considered as a secondary one. Indeed it is highly questionable, whether academies the best qualified in their courses of instructions and other appliances of every kind, would be willing to undertake the instruction of ten or less students, and for the sum to which this arrangement would necessarily restrict them. The committee are therefore unanimously of opinion, that the selection should be confined to one academy in each county that has applied.

In proceeding to designate the academies for this purpose, the committee have been guided by the best information within their reach, as to the ability of the applicant to perform the required duty. They submit the following list as in their opinion the preferable one, only remarking, that in a few instances, where claims have been presented of nearly equal strength, they have usually inclined in favor of such institutions as were deprived of their expected appropriation in 1844, in consequence of the change of the views of the Legislature relative to the instruction of Common School Teachers, and the establishment of the present Normal School.

With these explanations, the committee recommend that the following academies be designated for the purposes mentioned in the act above referred to, and for the years 1850 and 1851, respectively, unless revoked for the last named year by the Regents, on sufficient cause.

(The list of academies, with those subsequently added, will be found at the end of this report.)

The committee are also, by the above resolution, directed to report the forms to be required from said academies, to entitle them to the appropriation.

On this matter it is not necessary to be too specific. The law requires that the students shall be instructed in the science of common school teaching, for at least four months in each year. It is to be presumed that every academy applying is familiar with what is here intended. The pupils are certainly to be instructed in all the important elementary branches, they should also attend to as many of the more advanced studies as are compatible with their advancement on entering and the time they can spare, and above all they must be taught the science of common school teaching. But whether this last shall be by lectures, by witnessing the progress of a well ordered school during the above period, or by being placed for a portion of it in authority over a certain number of younger scholars and instructing and governing them, must in the opinion of the committee be in a great measure left to the judgment and discretion of the trustees and principals of the respective academies.

They however unite in advising that certain conditions should be exacted either from the academies, or the pupils thus received. They should be instructed free of charge for the four months in question. While it is understood that they may be received from any part of the State, it is at the same time only a proper return for the bounty of the State, that they should on entering, sign a pledge, that they intend to devote a reasonable time to the business of teaching district schools, and to make the obligation the more reliable, the age should be specified by the board, previous to which they should not be allowed to enter. In the Normal School the females are required to be on admission of the age of sixteen, and the males, eighteen; possibly this might be somewhat reduced in these county institutions, and the committee therefore recommend that the limit for females be 14 years, and for males 16 years.

The secretary should be instructed to prepare under the direction of a committee, the form of an annual report by each academy after completing its tour of duty,—of the name and age of each student claimed—the studies pursued by him and for what length of time—a schedule indeed resembling that now required in the annual reports. The time of the coming in of this report should also be fixed by the Regents. Probably the most convenient will be on or before the 1st of January in each of the years 1851 and 1852.

It has also been asked by several academies, whether the law contemplates or the Regents will expect that additional teachers are to be employed for the scholars in question, and whether they are to be taught separately from the other pupils. Even as to this it is not advisable to adopt positive rules. Most of the academies promise that if selected they will obtain an additional teacher. Others may have already a sufficient academical staff. Let this subject be a matter of specific answer in the annual return and the Regents can then judge whether justice has been done. As to rigid separation into distinct classes, the committee can imagine no advantage to result from it, unless there be great discrepancy in age and advancement between them and the other pupils. The same reasons which in any well regulated institution justify the union of certain individuals into one class or more, ought in this case to be the governing rule.

Again it has been inquired whether the instruction should be during four continuous months. Certainly this would be the most desirable, but in many academies the terms do not commence with the year, and again it may not always be convenient for the pupil to remain the full time in question at once. The law specifies four months of instruction during the year, and if this be complied with, the Regents cannot withhold the appropriation. Still it should be required to state in the annual return, whether any and if so what division of the time has occurred.

The committee are of opinion, that with a distinct expression of the views of the Regents on the matters now noticed, there can be little difficulty in organizing and in carrying out the intention of the Legislature, in enacting the law now to be acted upon.

CHRISTOPHER MORGAN,
HAMILTON FISH,
JOHN V. L. PRUYN.

The Regents unanimously agreed to the report of the committee, and designated the academies named by them for the purposes proposed by law. A few appointments in counties not previously considered, have subsequently been made, and the following is a complete list up to the present date:

1. *Allegany County,*	Friendship Academy,
2. *Broome County,*	Binghamton Academy,
3. *Cayuga County,*	Cayuga Academy,
4. *Chautauque County,*	Westfield Academy,
5. *Chemung County,*	Elmira Academy,
6. *Chenango County,*	Oxford Academy,
7. *Clinton County,*	Plattsburgh Academy,
8. *Columbia County,*	Kinderhook Academy,
9. *Cortland County,*	Cortland Academy,
10. *Delaware County,*	Delaware Academy,
11. *Dutchess County,*	Amenia Seminary,
12. *Erie County,*	Aurora Academy,
13. *Franklin County,*	Franklin (Malone) Academy,
14. *Fulton County,*	Kingsborough Academy,
15. *Genesee County,*	Genesee and Wyoming Seminary,
16. *Greene County,*	Coxsackie Academy,
17. *Herkimer County,*	Fairfield Academy,
18. *Jefferson County,*	Jefferson County Institute,
19. *Kings County,*	Brooklyn Female Academy,
20. *Lewis County,*	Lowville Academy,
21. *Livingston County,*	Genesee Wesleyan Seminary,
22. *Madison County,*	Oneida Conference Seminary,

23. *Monroe County,*	Brockport Collegiate Institute,
24. *Niagara County,*	Wilson Collegiate Institute,
25. *Oneida County,*	Rome Academy,
26. *Onondaga County,*	Munro Academy,
27. *Ontario County,*	East Bloomfield Academy,
28. *Orleans County,*	Yates Academy,
29. *Oswego County,*	Mexico Academy,
30. *Otsego County,*	Cherry Valley Academy,
31. *Rensselaer County,*	Sand Lake Academy,
32. *St. Lawrence County,*	St. Lawrence Academy,
33. *Saratoga County,*	Stillwater Seminary,
34. *Schoharie County,*	Schoharie Academy,
35. *Seneca County,*	Seneca Falls Academy,
36. *Steuben County,*	Franklin (Prattsburgh) Academy.
37. *Sullivan County,*	Liberty Normal Institute,
38. *Tioga County,*	Owego Academy,
39. *Tompkins County,*	Ithaca Academy,
40. *Ulster County,*	Kingston Academy,
41. *Warren County,*	Glens Falls Academy,
42. *Washington County*	Washington Academy,
43. *Wayne County,*	Red Creek Union Academy,
44. *Wyoming County,*	Middlebury Academy.

It is sincerely hoped that the above arrangement for increasing the number of well educated Common School Teachers throughout the State, may prove so successful, as to warrant the continued patronage of the constituted authorities.

During the last season, a large number of the academies in the north and northeastern sections of the State have been visited by a committee of the Regents, whose arduous and disinterested labors deserve the thanks of the public, while at the same time, their personal examinations have already proved of important benefit to the various institutions. Many of the academies in the west have been similarly inspected.

But the Regents, as they have repeatedly stated in their annual reports, are of opinion, that means should be afforded for making a thorough visitation of all the academies, both as to their financial, and their literary condition. Public institutions devoted by corporations or individuals, to the great cause of education, should be distinguished from such as are deemed, and probably with some degree of truth to be more or less, private property. That misapprehensions or jealousies exist on this subject, cannot be concealed, and the well being of the present system of academic instruction, evidently renders a close and searching examination necessary to conform the academies in all respects, to the high place and elevated rank, that they were intended by our predecessors to hold. A comparison in this respect, may even now be made, by inspecting the schedules accompanying this annual report, and the Regents indeed, while aware of their value, as statistical documents, are of opinion that a still more important benefit may be derived from them, in enabling each academy to compare its condition with that of others, and thus profit by their imperfections or improvements.

By order of the Regents of the University.

G. Y. LANSING, *Chancellor.*

T. ROMEYN BECK, *Secretary.*

Albany, Feb. 28, 1850.

DOCUMENTS.

(A.)

COLLEGES.

Reports of the several Colleges in the State, subject to the visitation of the Regents, made for the year 1849.

1. Report of Columbia College.
2. Report of Union College.
3. Report of Hamilton College.
4. Report of Geneva College and its Medical Institution.
5. Report of the University of the City of New-York, and its Medical department.
6. Report of Madison University.
7. Report of St. John's College, Fordham.
8. Report of the College of Physicians and Surgeons in the City of New-York.
9. Report of Albany Medical college.
10. Report of the Medical Department of the University of Buffalo.

11, 12. Tabular statements, showing the relative condition of the Literary and Medical colleges.

1. COLUMBIA COLLEGE.

To the Regents of the University of the State of New-York, the trustees of Columbia College submit the following report for the collegiate year, ending on the first day of October last, containing a true statement of facts, showing the progress and condition of the college during and at the close of the said year, in respect to the several subject matters following, viz:

Under the heads,

1. *Number and Description of Professorships.*

2. *Faculty and other College Officers.*

There is no change to notice since the last report.

3. *Number of Students.*

The number of students, undergraduates, during the year was 136, all of whom were regularly matriculated. The number on whom the degree of Bachelor of Arts was conferred at the commencement was 32.

Twenty students left the college from various causes, during the year, so that the remaining number was 84. It is not known that there were any students in the college under the age of 14.

4. *Classification of Students.*

The classification was,

1. In the Senior class,	32
2. In the Junior class,	31
3. In the Sophomore class,	33
4. In the Freshman class,	40

5. *College Terms.*

Remain as at previous reports, to which the trustees beg leave to refer.

Course of Study.

The sub-graduate course pursued this year was as follows:

The Freshman class attended the Adjunct Professor of the Greek and Latin languages daily for five days, and read:

Of Greek, two and a half books of Xenophon's Memorabilia; and of Latin, Cicero's Treatises, entitled Cato Major, Lælius Paradoxa and Somnium Scipionis, together with Nepos' Life of Atticus, in part. These studies were reviewed before examination at the close of each session.

Ancient Geography was taught by lectures which were copied by the class, and comprised, "The world as known to the Ancients," Italy, Greece, the islands of the Ægean and Asia Minor; the places referred to in each were pointed out by the class on Cramer's maps. In the Abridgment of the Dictionary of Antiquities they studied the articles relating to the military and naval affairs, the civil government, the public amusements, the coins, weights and measures of the Greeks and Romans.

In Ancient History, weekly recitations were required of the class. The text book used being Heeren's Manual of Ancient History.

In Greek and Latin Prosody, Latin Versification and Greek and Latin prose composition, the class had weekly exercises, and these studies were reviewed before examination.

In Mathematics the class attended the Professor three days in the week, the course being much the same as heretofore reported.

In German, the class attended the Gebhard Professor two days in each week and studied Beleke's German Grammar as far as Syntax, (115 pps,) twice, and read Follen's German Reader, 9 pps. of Schiller's poetry and 10½ pps. prose from Wieland's Abderiten. They also attended the Professor of Elocution two days in the week.

The Sophomore class, attended the Jay Professor of the Greek and Latin languages, four days in the week, and read in Greek the *Acharninsis*, *Plutus*, and *Clouds* of *Aristophanes*.

In Latin, the *Germany* and *Agricola* of *Tacitus*, and three books of the *Georgics* of *Virgil*. They also studied weekly, Greek and Roman Antiquities, and Ancient Geography, and practiced composition in Greek and Latin verse and prose. In the department of Moral Philosophy the class attended the Professor four days in the week, Monday being devoted to English composition; the three other days were devoted to the study of Modern European History; and in the second session, to that of England in particular, as connected with our own. Text books used, Heeren, Taylor, and Smyth.

In the department of Natural Philosophy, and Chemistry, the attendance and studies have been as heretofore reported, and especially in the report for 1847; since which time, no alteration has been made in the order or extent of the several courses.

In Mathematics and Astronomy, the class attended the Professor three days in the week, the course being the same as that reported last year.

In German, the class attended the Professor twice a week, read 82 pages of Schiller's William Tell, and wrote a considerable number of exercises from Follen's German Grammar.

The Junior Class attended the Jay Professor of Greek and Latin, four days in the week, and read in Greek, the *Olynthians* and *Philippics* of Demosthenes, the *Prometheus Vinctus* of Æschylus, and half of the *Seven* against *Thebes*.

In Latin, the *Andrian* of Terence, and portions of the *Eunachus* and *Heautontimoruninos*, *Horace's Art of Poetry*, and the *Epistles* to *Augustus* and *Mecœnas*. They also had a course of lectures on Roman Literature, with weekly examinations. They were exercised in the Metres of Terence, and in Greek and Latin composition, in prose and verse, as well as in Ancient Geography.

In the department of Intellectual and Moral Philosophy, the class attended four days in the week, divided as follows, during the first term. Monday, on themes or subjects connected with their course. Wednesday, to lectures on *Æsthetic Science.* Tuesday and Friday, to a more practical course of argumentative composition, using Whately as a leading text book.

In the Second Term, Monday, as before, to themes; Wednesday, to the history of English Literature, and Tuesday and Friday to Logic, again taking Whately as the general guide, the attention of each student being secured by daily viva voce examinations and a weekly examinations of their notes and private reading.

In Mathematics and Astronomy, the class attended the Professor three days in the week, the course of instruction being the same as reported last year, with the advantage to the present class, not enjoyed by their predecessors of learning practically, the use of astronomical instruments in the Observatory, which through the liberality of a private citizen, aided by the Board, has been provided in connexion with the College.

In Natural Philosophy and Chemistry, the class attended the Professor four days in the week, the order and subject of the studies being without change since the last report.

In German, a considerable number of the class attended the Gebhard Professor once a week, wrote the first seventy-six exercises in Ollendorf's Grammar, and read a part of Schiller's Geistersche. This is entirely a voluntary course on the part of the Juniors in addition to their other studies.

The Senior class attended the Jay Professor of Greek and Latin four days in the week, reading in Greek, Aristotle's Ethics, in extracts, the Art of Rhetoric, and the Art of Poetry from Dalzel's Collectanea Majora and the Ajax and Electra of Sophocles.

In Latin, eight satires of Juvenal from the 1st to the 12th, omitting the 2d, 7th, and 9th. They heard a course of lectures on Greek Literature, with weekly examinations and one exercise weekly in composition in prose and verse, in Greek and Latin.

In Intellectual and Moral Philosophy, etc., the class attended the Professor four days in the week; Monday, being devoted to themes or subjects within their course; Wednesday, to the evidences of Religion Natural and Revealed. Tuesday and Thursday, to Intellectual and Moral Philosophy in the first session, and to Political Economy in the last. Daily examinations orally, and written examinations once a week to secure the attention of the students to the lectures.

In Mathematics and Astronomy, the class attended the Professor twice a week, without any change in the course previously reported.

In Natural Philosophy and Chemistry, the class attended five days in the week, the order and subjects of the course having undergone no change since the last report.

In German, the class attended the Gebhard Professor one day in the week, wrote about 200 pages of exercises from Ollendorf's Grammar, and read part of Schillers's Geistersche.

Under the several heads of

7. *Exercises.*
8. *Examinations.*
9. *Mode of Instruction.*
10. *System of Discipline.*

The Trustees have nothing to add to previous annual reports to which they beg leave to refer.

11. *Gratuitous Aid.*

During the year, twenty four students were educated in the College free from all charges of tuition, and the Trustees repeat here what has been stated in previous reports, that the free scholarships are entirely gratuitous and that the College receives no pecuniary compensation or equivalent in any way for them.

Under the several heads of

12. *Statutes and By-Laws of the College.*
13. *Description and value of College Buildings.*
14. *Description and value of other College property.*
15. *Revenue.*

The Trustees have nothing to add to previous reports.

16. *Debts.*

The debts owing by the college at the end of the collegiate year, amounted last year to $62,904.

17. *Income and Expenditures.*

The income of the college for the last year was as follows:

Balance from old account,		$114 84
Students' fees,		9,585 00
Rent received,		10,609 09
Cash borrowed,	$14,200 00	
Less discount,	216 80	
		13,983 20
Grammar School from Literature Fund,		529 15
Reimbursements by lessees and premium of Insurance paid by col.		11 25

The expenditure was for

Salaries including portion of students' fees paid to President and Professors,	$13,066 20
Annuities,	1,700 00

Notes paid,	14,000 00
Interest on bonds, &c.	4,030 82
Insurance,	209 25
Allowance to Grammar School for books,	118 31
Expenses of commencement,	200 00
Fuel,	40 00
Taxes and repairs,	903 39
Sundries,	405 43
	$34,673 40
Balance,	159 13
	$34,832 53

The *Gebhard Fund* remains as by last report.

18. *Price of Tuition.*

The matriculation and graduation fees which include all charges, remain as stated by the Trustees in former reports.

19. *Close of the Report.*

The above report was adopted at a special meeting of the Board of Trustees held in the College on the 1st day of Feb. 1850.

In witness thereof, the said Trustees have caused their corporate seal to be affixed to the said report, and directed the same to be signed by their Chairman, Treasurer and Clerk.

E. W. LAIGHT,
Chairman.
G. G. VAN WAGENER,
Treasurer.

Clement C. Moore, *Clerk.*

2. UNION COLLEGE.

To the Regents of the University of the State of New-York:

The Trustees of Union College respectfully submit the following report for the last collegiate year ending July 25, 1849, " containing a just and true statement of facts, showing the progress and condition of said College during and at the close of said year, in respect to the several subject matters following," viz:

1. *Number and description of Professorships.*

The professorships in said College during said year, as established by the Trustees were the following:

A professorship of the Greek and Latin languages.
Rhetoric and Moral Philosophy.
Natural Philosophy.
Oriental Literature.
Mathematics.
Intellectual Philosophy and Political Economy.
Chemistry and Natural History.
Modern Languages.
Civil Engineering.

2. *Faculty and other college officers.*

" The faculty of said college including all persons charged with the duty of giving public instruction therein during said year," consisted of a president, four professors, four adjunct and assistant professors, and other officers of instruction, tutors &c., as specified below.

" The other officers or servants of said college charged with duties therein other than those of public instruction during said year," were a librarian, a clerk to the board of trustees, a treasurer, a register, a postmaster and clerk, a carpenter, a farmer, a smith, a gardener, a steward, four men servants, a teamster and three bell ringers. " The names of the several persons holding offices or places in said College during said year, with the offices and places held by them respectively and the salaries or annual compensation for official services allowed to each of them were as follows :"

Names of persons.	Professorship or other office held.	Salary.
Eliphalet Nott, D. D.,	President and acting Professor of Moral Philosophy,------------------------------- including the rent of a dwelling house and garden estimated at $200.	2200

Names of persons.	Professorship or other office held.	Salary.
Robert Proudfit, D. D.,	Professor of Greek and Latin Languages including the rent of a dwelling house and garden estimated at $200.	1200
John A. Yates, D. D.,	Professor of Oriental Literature, including the rent of a dwelling house and garden, estimated at $200.	1200
Isaac W. Jackson A. M.,	Professor of Mathematics, including the rent of a dwelling house and garden, estimated at $200.	1200
Thomas C. Reed, D. D.,	Professor of Political Economy and Intellectual Philosophy, including the rent of a dwelling house and garden estimated at $200.	1200
John Foster, A. M.,	Adj. Professor of Mathematics and Natural Philosophy,	1000 00
Jonathan Pearson, A. M.,	Adj. Prof. of Chemistry and Lecturer on Natural History,	1000 00
John Nott, A. M.,	Assistant Prof. of Rhetoric,	600 00
William M. Gillespie, A. M.,	Emer. Prof. of Civil Engineering and Adj. Prof. of Mathematics.	500 00
Hiram H. Perry, A. B.,	Tutor,	250 00
Howard Potter, A. B.,	"	200 00
Joel Huntington, A. B.,	"	200 00
Charles H. Taylor, A. B.,	"	200 00
A. M. Vedder, A. M., M. D.,	Lecturer on Anatomy and Physiology,	40 00
	Librarian vacant, $800.	
Jonathan Pearson,	Acting Librarian,	100 00
Alex. Holland,	Register, Treasurer and Acting clerk to Board of Trustees,	650 00
Levi H. Willard,	Post Master and clerk,	400 00
G. I. Van Vranken,	Carpenter,	391 25
Chris. Reagles,	Farmer,	391 25
Russell Rodgers,	Smith, (and workman at various trades)	391 25
William McNeven,	Gardener,	273 00
M. T. Cooper,	Steward North Hall,	300 00
James Rogers,	Servant and mail carrier,	235 00
Patrick Keyes,	Head Servant West College,	235 00
Patrick McKinney,	" South College,	235 00
Rody Martin,	" North College,	235 00
Cromwell Antis,	Teamster,	214 50
3 bell ringers,	North, South and West College,	99 00

3. *Number of Students.*

The whole number of students undergraduates in said College during said year, was		294
The number that left during the year, was		25
Of whom there were honorably dismissed,	11	
left from causes unknown,	12	
departed this life,	2	
Number remaining at close of the year,		269
The number of graduates at the last annual commencement July 25, 1849,		108
The whole number of students belonging to the Institution at the date of this report, (Feb. 1850,)		220

There were no students under 14 years of age. The average age of the graduating class was 22½ years.

4. *Classification of Students.*

The students who were undergraduates in said College during said year, were classified as follows, viz :

In the Senior Class,	120
Junior class,	85
Sophomore class,	61
Freshman class,	28

5. *College Terms or Sessions.*

The terms or sessions for studies in said college during said year were the following:

Three terms of twelve weeks each; the first commencing on the 8th of September, 1848, and ending Dec. 1; the second commencing January 5, 1849, and ending March 30th; the third commencing April 27th, and ending July 25th.

There were sixteen weeks vacation during the year.

6. *Subjects or Courses of Study—Freshman Class.*

First Term.—This class studied in Greek, Xenophon's Anabasis, (Owen & Cleveland's ed.,) with Tutor Perry, reading one half of the first and fourth books, with exercises in composition and written translation.

In Latin, Livy (Folsom's,) with Tutor Huntington, reading 55 pages.

Horace, with Tutor Taylor, reading the whole of the first book of the Odes, except the 13th and 25th; the second, excepting ode 5th, and one-half of the third book with written translations.

Second Term.—Greek was continued with Tutor Huntington, reading the extracts from Herodotus and Thucydides in the Græca Majora.

In Latin the remainder of the 3d book of Horace, together with the 4th book of the Odes, the first Satire, the epistle to Augustus, and three pages of the Art of Poetry, were read with Tutor Taylor.

The study of Algebra was commenced with Prof. Gillespie, using Davies' Bourdon, and going through the first four chapters; the class being required to hand in written solutions of many additional problems proposed to them.

Third Term.—In Greek, the class read with Tutor Huntington, Lysias, Isocrates, and the first Philippic of Demosthenes, with occasional lectures.

In Latin, the first book of Cicero de Officiis was read with Tutor Taylor, with composition and declamation.

Algebra was continued with Prof. Gillespie, through the Binomial Theorem.

SOPHOMORE CLASS.

First Term.—In Greek, the extracts from Xenophon's Memorabilia and from Plato in the 1st vol. of Græca Majora, were read by the class in two divisions, to Prof. Proudfit and Tutor Potter.

Geometry was commenced, using Davies' Legendre, the class reciting in two divisions to Prof. Gillespie and Tutor Potter, going through the first five books with additional problems.

Abercrombie's Intellectual Philosophy was studied by the class with Prof. Reed, going through the whole of the text book. At each recitation, compositions were read by two members of the class.

A division of the class studied Robbin's Outlines of Ancient History, with Tutor Huntington; about three-quarters of the book was read, and daily lectures given.

Second Term.—In Greek, a division of the class read with Prof. Proudfit, the extracts from Aristotle's poetics, from Dionysius Halicarnassus, Longinus, Theophrastus, Polyænus and Aleænus, in the 1st vol. of the Græca Majora, amounting to 72 pages.

In Latin, five of the Satires of Juvenal (Leverett's ed.) were read to Tutor Perry, with composition daily. The Andria in Terence was also read to Tutor Potter.

In Geometry, the remaining four books were taught as before, with select examples in the Mensuration of Surfaces and Solids.

A division of the class studied Paley's Natural Theology, with Prof. Nott, reading the whole work in connection with other works, such as the Bridgewater Treatises, &c.

Third Term.—In Greek, the class read in two divisions, three books of Homer's Iliad, to Tutor Perry and Tutor Potter. Six lectures on the Greek dialects and literature were given by the former.

In Latin, one book of the "History" of Tacitus was read by the class during half the term, in two divisions, to Tutor Perry and Tutor Huntington, with exercises in composition daily.

During the other half of the term the class recited to Prof. Pearson in Botany. Wood's Botany was used as a text book, the whole being studied in connection with Wood's, Gray's or Beck's Manual, and daily lectures, excursions and analyses.

Trigonometry, plane and spherical, with applications, using Davies' Legendre, was taught in two divisions by Prof. Jackson and Prof. Pearson.

JUNIOR CLASS.

First Term. In Greek, a division of the class read extracts from Hesiod, and the Œdipus Tyrannus of Sophocles in the 2d vol. of Græca Majora, amounting to 62 pages, with Prof. Proudfit. Another division read the same with Tutor Perry, with five lectures on the dramatic literature of the Greeks.

Conic Sections (Jackson's) were recited in two divisions to Professor Pearson, going through the whole work.

Algebra was studied by a division of the class with Prof. Gillespie, reviewing the leading points of the parts studied in the Freshman year, and continuing it through indeterminate Coefficients, the Theory of Logarithms, and the elements of the general theory of equations, using Davies' Bourdon with additional exercises.

In *Rhetoric* the class recited in two divisions to Prof. Yates and Prof. Nott, through the whole of Blair's Lectures, with daily exercises in composition and declamation.

In the department of Civil Engineering, a division of the Junior Class commenced the course with Geometrical Draughting, comprising the use of instruments in the construction of geometrical problems, followed by the elements of descriptive geometry, applied to the representation of objects by plans, elevations and sections, with examples from architecture, machinery, and the mechanical structures of engineering. The instruction was given three times a week in lectures, illustrated by models, and accompanied by sketches upon the blackboard, of the objects to be delineated. These sketches were copied by the students by eye without instruments, with notes of their dimensions; geometrical drawings of them were subsequently made to scale, and inspected and corrected at the beginning of the succeeding lecture.

Second Term.—In Latin, a division of the class read to Professor Proudfit 140 pages of the first two books of Cicero de Oratore, Kingsley's edition; and a division of the class read the Captive in Proudfit's edition of Plautus, to Tutor Perry.

The Cambridge Mechanics was studied by the class with Professor Foster, going through 100 pages of Statics, and 45 pages of Dynamics. The recitations were accompanied by frequent oral discussions, and by such experiments as were required for the clear understanding of the subject.

In Chemistry the class recited to Prof. Pearson; Draper's chemistry was used as the text book, one-half of which was studied, with experiments.

In German, a division of the class recited to Prof. Yates, using Ollendorf's Grammar and Reader, going over about 60 pages of the latter.

In the department of civil engineering, draughting was continued by Prof. Gillespie, and the principles and practice of Isometrical and oblique projections, and natural perspective, shades, and shadows, &c., taught in a similar manner to the first term's course.

Third Term.—In Greek, a division of the class read about two-thirds of the tragedy of Medea, with Prof. Proudfit.

Analytic Geometry, of two and three dimensions, was studied by a division of the class with Prof. Jackson, using Davies' text book, 140 pages.

Cambridge Mechanics, was continued with Prof. Foster, the class reciting 60 pages on the subjects of Hydrostatics, Hydrodynamics, and Pneumatics; and also the article (about 60 pages,) in Draper's Chemistry on heat. During the term, about twenty-five experimental lectures on the subjects above mentioned were given.

In Political Economy, the class recited to Prof. Reed; they read the first eight, and the 20th and 21st chapters of the first book, and the whole of the second and third book of Say's Political Economy. Compositions were read weekly on subjects connected with the science, and occasional lectures delivered. The mode of teaching has been to require of the students, a thorough knowledge of the text book, a recitation without any aid from the instructor, and an endeavor by conversation to secure a knowledge of the subject.

In French, the class, in two divisions, were instructed by Mr. L'Amoreux. The art of pronunciation was taught by rules furnished by the instructor, and by daily practice. The grammar was taught from Meadows or Levizac, in part also by brief lectures. The exercises in translation were accompanied with critical remarks by the instructor, on the etymology of words, idioms, their history and comparative character ; the poetical, oratorical, and practical adaptations of the language, and especially its bearing on our own tongue. The text book used was De Fivas' elementary reader; the class advanced to the 40th page.

SENIOR CLASS.

First Term.—This class recited to the President on the intellectual and active powers of man, and the application of taste to the Fine Arts. The text book chiefly used was the first volume of Kames' Elements of Criticism. The teaching, however, was principally by lectures, accompanied by daily examinations thereon, as well as on the portion of the text book read.

In Greek, a division of the class read with Prof. Reed the Prometheus Vinctus of Æschylus.

The Differential and Integral Calculus was studied by a division of the class with Prof. Jackson. Text book, Davies, 150 pages.

Astronomy was studied by the class with Prof. Jackson, using Gummere's Astronomy as a text book, of which 150 pages were read, and made the basis of a series of oral lectures.

In the Cambridge Mechanics, the class recited to Prof. Foster, through the article on the steam engine. The same subject was farther treated in three lectures, accompanied by illustrations, with experiments and with models. Daily oral lectures were then given as follows: on Acoustics 12; on Electricity 12; Magnetism 6; Galvanism 6; Electro Magnetism 12. Notes were taken by the students at the lecture and afterwards written out in full, with drawings of apparatus and experiments, and submitted once a fortnight to the inspection of the Professor. Each lecture was prefaced by a brief oral examination of the preceding one.

In French, a division of the class studied with Prof. Yates, reading portions of Moliere.

In the Civil Engineering course, a division studied Higher Surveying with Prof. Gillespie, comprising the use of the Theodolite and Sextant, the principles of Topography, Geodesy, Maritime Surveying, railroad curves, &c.; taking notes of the lectures, upon which they were examined the next day, and which they applied in the field.

Second Term.—The second volume of Kames was read in like manner with the first, and the study of Moral Philosophy commenced. Paley was the text book used.

In Greek, a division of the class read with Prof. Reed the Clouds of Aristophanes.

Optics was studied by the class in two divisions with Prof. Jackson. Jackson's Optics was the text book, of which the whole was read:

Analytic Dynamics was studied by a division of the class with Prof. Jackson, reading 175 pages of Boncharlat.

In Intellectual Philosophy and Logic, the class recited to Prof. Reed in two divisions. The text book in Philosophy was Stewart's; the whole of the first volume and selected portions of the second volume, amounting to about one-third of the volume, were read.

Logic was taught by lectures; besides the lectures on Logic, sixteen lectures were delivered on subjects connected with general philosophy. Compositions were read weekly on subjects connected with the study.

Hebrew was studied by a division of the class with Prof. Yates, using Stuart's Hebrew Grammar and Chrestomathy.

In the Civil Engineering course, a division of the class studied with Prof. Gillespie, the theory and practice of the location, construction and improvement of roads and railroads, with frequent exercises in calculation, using as a text book, Gillespie's Manual of Road making. Lectures were also given upon bridges of stone, wood and iron, the principles of mensuration and estimation, and upon collateral subjects.

Third Term.—The study of Moral Philosophy in connection with the principles of the common and the civil law, was continued; and though Paley was still made use of as a text book, those parts only having respect to moral duty and general jurisprudence, so far as the same is applicable to the United States, were read. As the object with the Senior Class is not so much to strengthen the memory as to teach the learner to think and reason, the lessons in the text book are always short, the comments extensive, and the reviews frequent. The form of recitation in the first instance is not by question and answer, but the student is required to analyze the portion of the text book or the lecture as the case may be, and state the contents, after which questions are put and answers given, and discussions invited.

The mere statement of the author read and recited gives a very imperfect view of the amount taught or the manner of teaching, and this for the reason that the study and recitation of the text book is accompanied by a course of lectures either extempore and colloquial, or written and formal, embracing a great variety of topics not included in but suggested by said text books.

The great object in view of this class being, as already intimated, to teach the members thereof to think and act, and fit them for a successful performance of the duties of life; the whole of the exercises are so conducted as to contribute as far as possible to this end. During the course, original compositions are spoken and subjected to critical examination, on one day in every week; extempore debates are required on another day of the week; besides which some members of the class read compositions to the President in his study and leave the same for criticism on almost every day during the third term.

Kent's Commentaries on American law, vol. 1, was studied by a division of the class with Prof. Gillespie with constant collateral illustrations.

Hebrew was studied by a division of the class with Prof. Nott, using Gesenius' Hebrew Grammar.

Botany was studied by the class on two days of the week with Prof. Pearson, using Wood's Botany with lectures, excursions, and analyses.

Anatomy and Physiology were taught by lectures delivered to the class by Doct. Vedder daily. The lecturer aims at giving such a course as will be useful and instructive to young men who may engage in any profession. Minute anatomical descriptions are not therefore entered into, only so far as to enable the student to understand the various functions of the human system. Lectures were given on sensation, voluntary motion, digestion, absorption, respiration, circulation, nutrition, calorification, secretion and the functions of reproduction. The lectures were illustrated by drawings and anatomical preparations.

Lectures on Civil Engineering with exercises for calculation, in connection with the study of Mahan's text book, were given, upon the nature and strength of materials, their combinations in carpentry and masonry, stone cutting problems, the mechanics of engineering, canals, river improvements &c. As a summing up of the course, a line of road was definitely located in the field, mapped, estimated and staked out ready for construction.

During the whole time the students of this course pursued collaterally such portions of the regular college course of mathematics and physics as they were found to require.

7. *Exercises.*

The exercises in composition, declamation, and in extemporaneous speaking, &c., are set forth in the preceding section in connection with the studies pursued, &c.

There were no "gymnastic or military exercises," nor were any exercises in reading or "other primary arts connected with education," required of the students, except such as came in connection with the course of studies as above given.

8. *Examinations.*

The number of public examinations in the College during said year have been three. The first was held on the 20th, and 21st of Nov. 1848. The second, on the 26th and 27th March, 1849. The third on the 16th, 17th, and 18th of July, 1849.

The several classes are examined separately, at the same time, and the examination of each class, is conducted by an examining committee, appointed for that purpose, which committees make a special report of the result of the several examinations to the Board of Trustees.

9. *Mode of Instruction.*

The process of instruction as will appear from the reports of the officers, as given under the head of "Subject of Study," varies according to the nature of the study pursued, embracing recitations from the text books, analyses, lectures, &c.

The average number of recitations, lectures, or exercises of instruction, required to be attended by all the students, is three daily, during five days of the week, and one on Saturday morning. There are also, daily, various voluntary recitations, in studies not embraced in the regular course.

10. *Discipline.*

The discipline of this institution, during the past year, has been, as heretofore, on the parental and preventive system. The object is to *prevent*, by the exercise of vigilance, and of a kind of moral influence, the formation of vicious habits, and the commission of specific offences, and at the same time to cherish manly and generous sentiments of action, and establish principles on the only sure foundation, that of virtue and religion. No public punishments were inflicted during the year. A merit roll showing the relative standing of each student, in attendance, conduct, and scholarship, in each study pursued, is made out at the end of each term, and publicly exhibited during the succeeding term; the same information in regard to each individual student, is communicated at the end of the term to their parents or guardians, and oftener if required.

11. *Gratuitous Aid.*

The provision made in this institution for the aid of indigent students consists of the income arising from funds amounting to fifty thousand dollars. From the income of these funds one hundred and twenty-seven students have been assisted within the year embraced in this report.

12. *Statutes or By-Laws of the College.*

A copy of an abstract of the by-laws, as the same are given to students on their entrance into college, are herewith submitted.

13. *Description and value of College Buildings.*

The number of buildings used for college purposes is six. Two buildings on the hill, eastward of the compact part of the city of Schenectady, each two hundred feet long by about forty feet wide and four stories high, with a colonnade extending back from one end of each, one hundred and fifty-six feet in length by thirty feet in width and two stories high.

These two buildings furnish residences for the President, three of the Professors, apartments for two Tutors, and dormitories for about 175 students. They also contain the rooms used for Junior and Senior class chapel exercises, recitation rooms, &c., three society halls and libraries, philosophical and chemical apparatus, rooms, &c.

The old or west college, building, situated on Union street in the city, being about 225 feet long by 40 wide and four stories high, contains a residence for one Professor, apartments for two Tutors, and dormitories for about eighty students, the college library and rooms for the Freshman and Sophomore chapel exercises, recitations, &c., &c.

In the same enclosure with the old college, is the museum, a building feet by feet, containing the geological and mineralogical collection, including the State donation, the late cabinet of John Bonney, Esq., and a valuable series of anatomical preparations presented by the Rev. James Rawson, M. D., and miscellaneous curiosities.

The other buildings belonging to the college are a house for a Professor, a farm house, a hospital, tenements for the accommodation of servants, two boarding halls, &c., &c., which buildings with the site of about two hundred and eighty acres, including the botanical and flower gardens, ornamental grounds, the gardens connected with the residences, the site for an observatory, &c., &c., are estimated in the treasurer's report of April 5, 1847 to have cost $296,485.31.

The several libraries to which the students have access, contain about sixteen thousand volumes. The total value of the college library and the philosophical and chemical apparatus is estimated in said report at cost to be $34,817.39. Total estimated value of buildings, grounds, library, apparatus, &c., &c., at cost, $331,302.70.

14. *Description and value of other college property.*

Bonds and mortgages belonging to the fund for the support of President and Professors under the act of March, 7, 1800,	43,583 95
Stocks belonging to the fund for the support of Professors under the act of March 30, 1805,	35,000 00
Bonds and mortgages and stocks belonging to the fund for the assistance of indigent students under the act of April 13, 1814,	50,000 00
Funds remaining at the disposal of the Trustees on the 5th of April 1849, and which have not materially changed in amount since that date, a considerable part of which is not only unproductive, but will probably never be collected,	144,288 56
	$272,872 51

These funds remain invested nearly the same as reported on the 5th of April 1849, with the exception of the Bond of Yates and McIntyre which has been paid, and other securities to the same amount substituted in place thereof.

15. *Revenue.*

Amount charged for tuition during the year,	$6,460 75
For room rent,	1,202 00
	$7,662 75
Rents,	1,100 00
Interest on the permanent fund of the college,	13,734 00
	$22,496 75

16. *Debts.*

The debts of the institution remain as reported April 5, 1849 with the exception of the amount due the Schenectady bank which has been paid, $28,675.51.

17. *Income and expenditures.*

The amount of income as above stated,	$22,496 75
The expenses have been as follows:	
Officers, Agents and servants,	$12,658 90
Charity students,	3,804 00
Library and apparatus,	279 89
Buildings and site,	2,935 01
Botanic Gardens and ornamental grounds,	500 00
Interest on debt,	1,895 79
Incidentals,	296 00
	$22,369 59

18. *Price of Tuition.*

The price charged for tuition, room rent, and of library for the year, is $38 . 25 ; the other necessary annual expenses of a student amount to abount $80.

19. *Remarks.*

20. *Close of report.*

This report is made in accordance with a special resolution of the Board of Trustees of Union College passed in July 1837, directing the Treasurer to make out the annual report to the Regents until otherwise ordered ; a certified copy of which resolution is on file in the office of the Secretary of the Board of Regents.

All which is respectfully submitted.

ALEX. HOLLAND,
Treasurer.

Union College, Feb. 1, 1850.

3. HAMILTON COLLEGE.

To the Board of Regents of the University of the State of New-York, the Trustees of Hamilton College respectfully report:

1. *Number and description of Professorships.*

The Professorships in said College during the year, were the same as heretofore stated, with this exception: The Professorship of Moral Philosophy, and Belles Lettres, has been connected with the office of College Pastor, and an Adjunct Professorship of Rhetoric and Elocution created.

2. *The Faculty, and Board of Instruction, and other College officers.*

The Faculty and Board of Instruction, consisted of a President, five Professors, for a portion of the year, and six, for the residue, two tutors, a lecturer on Anatomy and Physiology, and a teacher of French, as follows:

Rev. Simeon North, D. D. LL. D., President.

Charles Avery, A. M., Professor of Natural Philosophy, Chemistry, Geology, and Mineralogy.

Rev. Henry Mandeville, D. D., Professor of Moral Philosophy, and Belles Lettres, (from August 15th, 1848, until February 1st, 1849.)

Marcus Catlin, A. M., Professor of Mathematics and Astronomy.

Rev. Robert J. Boyd,* A. M., Professor of Moral Philosophy, and Belles Lettres, and College Pastor, (from April 15th, 1849.)

Theodore W. Dwight, A. M., Maynard Professor of Law, History, Civil Polity, and Political Economy.

Edward North, A. M., Dexter Professor of Classical Literature.

Anson J. Upson, A. M, Adjunct Professor of Rhetoric and Elocution.

David A. Holbrook, A. M., Senior Tutor and Librarian.

Henry P. Bristol, A. M., Tutor.

Panet M. Hastings, M. D., Lecturer on Anatomy and Phisiology.

Mons. Desfosses, Instructor in French.

Benjamin W. Dwight, Secretary, and Treasurer.

During this year, instruction in German was furnished to the Junior Class by one of the College Faculty.

Prof. Mandeville resigned his Professorship about February 15th. The vacancy thus created, was filled at the meeting of the corporation in April. During the vacancy, the duties of his chair were performed by Prof. Dwight, and Upson.

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* Jas. R. Boyd.—T. R. B.

3. *Number of Students.*

The whole number of undergraduates during the year, was, ---	166
Of whom left college during the year for various reasons, -----	10
Number of graduates at the last commencement, -----------	47

No students were connected with the college, who were not engaged in the regular course of study. There were none under fourteen years of age. The average age of the graduating class, was 23.

4. *Classification of Students.*

In the Senior class,------------------------------------	51
In the Junior class,------------------------------------	40
In the Sophomore class,--------------------------------	45
In the Freshman class, --------------------------------	30
	166

5. *Collegiate Terms and Sessions.*

1.	From the third Wednesday in September,---------	13 weeks.
2.	" first Wednesday in January,-----------	13 "
3.	" fourth Wednesday in April till commencement,---------------------------	13 "

6. *Course of Study.*

The following is a list of the studies pursued in the several classes, with the number of exercises in each study, and the instructors under whose direction such exercises took place.

FRESHMAN CLASS.

Folsom's Livy,------------	72 exercises,----	Tutor Holbrook,
Mandeville's Elements of Reading and Oratory,----	72 " ----	Prof. Mandeville.
Loomis' Algebra,----------	72 " ----	Tutor Holbrook.
Owen's Xenophon's Anabasis,	48 " ----	Prof. North.
Anthon's Horace (Odes,)----	48 " ----	"
Xenophon's Memorabilia,---	48 " ----	"
Loomis' Geometry,---------	47 " ----	Tutor Holbrook.
Homer's Iliad,------------	78 " ----	Tutor Bristol.

Greek Testament,	36	exercises,	Tutor Bristol.
Class Exercises in Composition,	36	"	
Chapel Exercises in composition and declamation,	75	"	Profs. Mandeville and Upson.

SOPHOMORE CLASS.

Homer's Iliad,	48	exercises,	Prof. North.
Loomis' Geometry,	70	"	" Catlin.
Day's Mathematics, with field exercises in surveying and engineering,	72	"	" Catlin.
Anthon's Horace,	48	"	" Upson.
Demosthenes de Corona,	48	"	" North.
Newman's Rhetoric and Lectures on Eng. Literature,	60	"	" Dwight.
Cicero de Senectute et Amicitia,	48	"	Tutor Holbrook.
Antigone of Sophocles,	48	"	Prof. North.
Conic Sections and Spherical Trigonometry,	72	"	Prof. Catlin.
Greek Testament,	36	"	Prof. North.
Class exercises in composition,	36	"	
Chapel exercises in composition and declamation,	75	"	Profs. Mandeville and Upson.

JUNIOR CLASS.

Differential and Integral Calculus,	48	exercises,	Prof. Catlin.
Terence's Andria, &c,	48	"	Prof. Upson.
Agamemnon of Æschylus,	72	"	Prof. North.
Olmsted's Natural Philosophy,	96	"	Prof. Avery.
Germania and Agricola of Tacitus,	48	"	Prof. Upson.
German Grammar and Reader,	72	"	"
French "	72	"	Mons. Desfosses.
Whateley's Rhetoric,	36	"	Prof. Upson.
Whateley's Logic,	36	"	Pres. North.
Say's Political Economy,	48	"	Prof. Dwight.
Historical Lectures,	36	"	"

Class exercises in composition,	36 exercises,	Prof. Dwight.
Chapel exercises in composition and declamation,	75 “	Profs. Mandeville and Upson.

SENIOR CLASS.

Upham's Intellectual Philosophy,	72 exercises,	Pres. North.
Lectures on Chemistry,	78 “	Prof. Avery.
Say's Political Economy,	12 “	Prof. Dwight.
Wayland's Moral Science,	48 “	Profs. Mandeville and Dwight.
Duer's Outlines of Constitutional Law,	48 “	Prof. Dwight.
Olmsted's Astronomy,	72 “	Prof. Catlin.
Blackstone's Commentaries on Municipal Law,	80 “	Prof. Dwight.
Lectures on Geology,	26 “	Prof. Avery.
Lectures on Anatomy and Physiology,	30 “	Dr. Hastings.
Greek Testament,	26 “	Pres. North.
Lectures on the Evidences of Christianity,	12 “	Pres. North.
Forensic Disputes,	26 “	Prof. Dwight.
Chapel Exercises in Oratory,	34 “	Profs. Mandeville and Upson.

It is deemed proper to add, that previous to the examinations at the close of each term, all the authors specified were thoroughly reviewed. On Monday morning of each week, there was a recitation in the Freshman and Sophomore classes, and for a part of the year in the Senior class, in the Greek Testament. Other lectures beside those mentioned in the above schedule were given in connection with the text books used in the various departments. In such cases, and in the courses of lectures above mentioned, the respective classes were examined upon the subjects thus presented.

As the Regents in their instructions require particular information in regard to *legal* and *medical* studies when pursued in college, it is thought proper to say, that the *Law* professorship is, as organized, a strictly undergraduate professorship, and designed to furnish instruction in the elements of law to the whole body of students, that the course of study pursued is a combination of lectures and recitations from text books. and that the students are examined as thoroughly upon the information conveyed by the teacher as upon that, derived from the text of the author studied. *Medical* Instruction is furnished by lectures to the whole class, upon which, as far as practicable, the students are examined.

7. *Public exercises, examinations, modes of instruction, discipline as heretofore stated.*

8. *Gratuitous Aid.*

The College has no fund appropriated to the aid of indigent students. By a special resolution of the college corporation, however, the expenses of that class of students are diminished by a remission of the ordinary charges for tuition ; and of the entire number of students, between fifty and sixty have claimed and received the benefit of this resolution.

9. The College buildings are the same, and substantially in the same condition as at the last report.

The Philosophical and Chemical Apparatus, and the Cabinet of Minerals, and Geological Specimens have not experienced any material alterations, nor has the Library.

The permanent funds of the College, are also very nearly the same as at the last report. The permanent fnnd, appropriately so called, has slightly increased, and on the 15th of August, ult., amounted (including certain notes of hand, on which interest is received,)

to,	$39,691 79
The Maynard fund has also increased a little, and amounted at the same time to,	16,829 56
The Dexter fund, to	15,000 00
Total,	$71,521 35

The two former funds were wholly invested on the 15th of November last, (except $462.50 of notes of hand belonging to the first named,) in bonds and mortgages, and a permanent lease, and except a note of $1,000 belonging to the last named.

There is due from graduates on note account and from students on book account, a large amount, estimated to be eventually worth about $6,000.

10. The amount charged on account of students' term bills during said year was as follows, viz:

	Tuition, Matriculation and Degrees.	Room rent.	Contingent expenses.	Total.
	$4,354 11	$1,093 25	$1,533 84	$2,810 45
Deduction to indigent students of the Senior class, embracing their whole college course,..	1,543 66			1,093 25 1,533 84
				$5,437 54
Say tuition,..................	$2,810 45			

From this sum a small amount is eventually to be deducted for absences on account of teaching and sickness, &c., which cannot fully be adjusted at the time of making this report.

11. The income received from all sources during said year was derived,

1.	From students' term bills,----------	$4,517 01	
	Graduates,------------------	195 54	
			$4,712 55
2.	" interest of Permanent Fund,-------------		2,693 24
3.	" interest of Dexter Fund,----------------		1,050 00
4.	" interest of Maynard Fund,--------------		1,340 45
5.	" Rents,-------------------------------		119 00
6.	" State grant,-------------------------		3,000 00
7.	" miscellaneous, ------------------------		10 55
	Total for expenditure,--------------		$12,925 79
8.	Amount received for investment, viz:		
	1. From subscriptions to Permanent Fund,------------------------	$55 04	
	2. From payments on loans to be re-invested, viz:		
	Permanent Fund,---------------	2,030 86	
	Maynard Fund,-----------------	596 00	
			2,681 90

Recapitulation.

1.	Receipts for expenditure,----------	$12,925 79	
2.	" for investment,-----------	2,681 90	
			$15,607 69

12. *Expenditures and investments.*

1. By payments to College officers,	$8,768 28	
2. By miscellaneous expenses,	2,704 05	
3. By Chemical Department,	75 00	
4. By Library,	50 00	
5. By charges on Maynard Fund,	56	
6. By interest on bonds,	96 00	
7. By legal services from 1835 to this time, and costs of suits at law,	1,298 90	
		$12,992 79
8. By investments of Permanent Fund,		2,237 00
		$15,229 79

Recapitulation.

Balance on hand, August 15, 1848,	$141 86	
Rec'd during the year ending Aug. 15, 1849,	15,607 69	
	$15,749 55	
Cr.		
By expenditures and investments,	15,229 79	
Balance on hand August 15, 1849,		$519 76

This balance belonged to the Maynard Fund; a small sum additional belonging to the Maynard Fund, and a small amount of the permanent fund was temporarily loaned to the general fund, for which provision was made at the same time; but to avoid the loss of interest was not called for until an opportunity for investment offered.

13. The debts due from the trustees amount to very nearly	$7,000 00
14. The means of payment consist of notes of graduates scattered over the United States, and amounting to upwards of	9,600 00
To charges on book account of students' term bills, the amount of which last item estimated to be collectable, is about	1,500 00
The whole amount to be eventually worth at least	*6,000 00

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* The State grant of $3,000, having been received for the last two years, after the 15th of August instead of before that time, as had been customary in preceding years, an apparent increase of indebtedness occurs which would not take place under other circumstances.

The charge for tuition is to all the students $30 per annum. The tuition to the Sophomore and Freshman classes was raised nine dollars per annum to each student, at the commencement of the past year.

All which is respectfully submitted.

BENJAMIN E. DWIGHT,
Secretary and Treasurer of Hamilton College.

SIMEON NORTH,
Chairman of the Executive Committee.

Hamilton College, January 17, 1850.

4. GENEVA COLLEGE.

To the Regents of the University of the State of New York:

The Trustees of Geneva College beg leave to submit the following report, for the last college year, ending August 14, 1849:

1. *Number and description of professorships.*

As in last annual report.

2. *Faculty and other college officers.*

Rev. BENJAMIN HALE, D. D., President.

Faculty of Arts.

Rev. BENJAMIN HALE, D. D., President and Startin Professor of the Ethics and Evidences of Christianity.

Rev. HENRY LORENZO LOW, M. A., Professor of the Greek and Latin languages, and of the Modern languages.

DAVID BATES DOUGLASS, LL. D., Professor of Mathematics and Natural Philosophy.

JOSEPH MORISON CLARK, B. A., Tutor.

BENJAMIN HALE, Jr., B. A., Tutor.

Professor HADLEY, of the Medical Department, gives instruction to the undergraduates in Chemistry.

HENRY LORENZO LOW, M. A., Treasurer.

Faculty of Medicine.

See second part of this report.

3. *Number of Students.*

The whole number of students in college during the year was *forty-three;* of whom, *thirty-eight* were actually present. The five not present, had given no notice of any intention to leave college, and were therefore considered members. It is not our practice to consider any as members of college, or to insert their names in our catalogues, who have left college, or who, without having taken a regular dismission, have been absent, without notice, a year.

They were distributed as follows, viz:

Seniors,	10
Juniors,	10
English Junior,	1
Sophomores,	10
English Soph.,	2
Freshmen,	9
English Freshmen,	1
	43

Of the *five* not present, *two* were Juniors, *two* Sophomores, and *one* Freshman.

The number who received the degree of A. B., at commencement, was *ten.*

The number who left college during the year was six; three of them being English students.

4. *College Terms or Sessions.*

1. September 14, 1848, to December 19, 1848,	14	weeks.
2. January 19, 1849, to April 24, 1849,	14	"
3. May 24, 1849, to August 14, 1849,	12	"
	40	"

Note.—The time of holding Commencement was changed by the Trustees from the *first* Wednesday in August to the *Tuesday* preceding the *third* Wednesday.

5. *Course of Study.*

SENIOR CLASS.

	Lessons.
Butler's Analogy, through,	61
Say's Political Economy, through,	41
History of Philosophy, trd. by Henry. Selections from each vol.	28
Olmsted's Natural Philosophy,	46
Astronomy, Norton's	37
Tertulliani Apologeticus adversus Gentes,	30
Aeschylus, Prometheus Vinctus,	18

Chemistry, Lectures,	30
Architecture, do	15
Mineralogy and Geology, lectures,	24
Anatomy, Physiology, Medical Jurisprudence, &c., lectures with the Medical class,	No. not reported.
French. Guizot, Civilization en Europe,	43
German. Adler's Reader, and Ollendorf's exercises,	23
Extemporaneous discussions. before the President,	14

Compositions and declamations as heretofore.

Junior Class.

	Lessons.
Campbell's Rhetoric finished from preceding year,	43
Whewell's Elements of Morality, vol. I. (except B. II.)	47
Cousin's Psychology, by Henry, through	48
Paley's Evidences of Christianity,	30
Taylor's History, ancient and modern,	50
Descriptive Geometry, Davies's, and perspective (taught by Lectures.)	60
Natural Philosophy, Olmsted's through, Mechanics,	40
Tacitus, History, 140 sections,	42
Aristophanes, the clouds,	25
Sophocles, the Antigone,	34
Demosthenes, de Corona, 166 sections,	45
Extemporaneous discussion, before the Pres.	27
Compositions,	15

Sophomore Class.

	Lessons.
Whateley's Logic,	42
Campbell's Rhetoric, books II. and III.	35
Horace, from book v. of Odes, (included) through satires, epistles, &c.,	53
Terence, the Andria and Adelphi,	26
Plautus, Amphitruo and Aulularia,	38
Homer's Odyssey, 9 books (continued from last year,)	55
Euripides, Alcestis,	26
Sophocles, Electra,	29
Greek Testament (Monday mornings)	36
Geometry, continued and finished,	34
Trigonometry (Davies')	32
Conics, Coffin's,	12
Surveying, Davies' (with field practice,)	21

French, in Ollendorf & Gil Blas,	19
Compositions and declamation as heretofore,	

FRESHMAN CLASS.

Ovid's Fasti, books I. and II. Book I. and 407 lines of book II. reviewed,	66
Livy, book III. and 36 ch. b. IV. Reviewed 38 ch.,	65
Adam's Rom. Antiq. in connection with Latin Prosody in Adam's Grammar, and the preceding authors.	
Horace, b. I. II. and IV. of Odes, Epodes, and Carm. Sec.	41
Xenophon's Memorabilia, b. I. and 2 ch. b. II. (rev'd pt of b. I.)	64
Fisk's Greek Grammar reviewed,	
Herodotus, 83 ch. b. I. Rev'd 35 ch.	52
Homer's Iliad, b. I. and II.	32
Greek Testament,	36
Algebra, Davies' Bourdon,	113
Geometry, Legendre, by Davies, 6 B.,	50
Exercises in Elocution,	27
" Declamation,	17
" Composition,	18
French, Ollendorf's Grammar, 14 lessons, Gil Blas, 7 paragraphs,	15

NOTE.—The instruction in Mathematics suffered some interruption through the illness of the Professor, the late D. B. Douglass, LL. D., whose lamented death took place on the 21st Oct. 1849.

6. *Exercises.*

In declamation, composition, discussion, the use of instruments, as heretofore, and as reported above.

7. *Examinations.*

1. Dec. 12, 1848, to Dec. 19,	6 days.
3. Ap. 18, 1849, to Ap. 24,	6 "
3. Aug. 6, " to Aug. 11,	6 "
	18

8. *Discipline.*

As heretofore.

9. *College buildings and other property.*

Buildings as in last report.

Library and cabinets slowly increasing.

Bonds and mortgages,	$3,013 00

Revenue.

Received on term bills,	880 64
" interest,	49 00
" rent,	160 00
" for Hobart professorship,	245 62
" from Prot. Episc. Society,	500 00
" on allowance from the State, from J. Fellows, esq.,	
Balance of former year,	904 61
For the year 1848-9,	2,600 33
Borrowed at Bank of Geneva,	100 00
	$5,440 20

Expenditures.

Salaries,	$3,001 37
Incidentals,	1,053 35
Interest,	213 26
Notes at Bank of Geneva,	371 00
To Medical Faculty,	500 00
Invested for Hobart professorship,	212 00
	$5,450 93

Debts.

Due to the Faculty, from the cause mentioned in report made in 1848,	$3,497 90
Other debts,	2,975 28
	$6,473 18

PART II.

The second part of this report consists of a report made by the Medical Faculty to the Trustees, as follows:

REPORT OF THE MEDICAL FACULTY TO THE TRUSTEES OF GENEVA COLLEGE, FOR THE YEAR ENDING JANUARY 23, 1850.

The Medical Faculty of Geneva College respectfully present to the Trustees the following report of the Medical Institution:

1. *Number and description of Professorships.*

The professorships in said Medical Institutions for the last year, were the following:

1. Institutes and Practice of Medicine.
2. Obstetrics and Diseases of Women and Children, and Medical Jurisprudence.
3. Anatomy and Physiology.
4. Chemistry and Pharmacy.
5. Principles and Practice of Surgery.
6. Materia Medica and General Pathology.

2. *Faculty and other College officers.*

The Faculty of said Medical Institution, including all persons charged with the duty of giving public instruction therein, during said year, consisted of one professor for each of the professorships enumerated in the preceding article, and a Demonstrator of Anatomy. The other officers and servants, charged with duties therein, other than those of public instruction, during said year, were the Curators, a Dean, Registrar, Treasurer, Librarian and Janitor.

The names of the several persons respectively holding said offices, or places, and the contingent salaries of professors, by way of ticket fees, were as follows:

CHARLES A. LEE,	Dean, and Professor of Materia Medica and General Pathology,----------	10
C. B. COVENTRY,	Treasurer, and Professor of Obstetrics, Diseases of Women and Children and Medical Jurisprudence, ----------	10

JAMES WEBSTER,	Professor of Anatomy and Physiology,	10
JAMES HADLEY,	Registrar and Professor of Chemistry and Pharmacy,	12
WILLIAM SWEETSER,	Professor of Institutes and Practice of Medicine,	10
JAMES BRYAN,	Professor of Principles and Practice of Surgery,	10
GEO. W. FIELD,	Demonstrator of Anatomy and Librarian. He receives a fee of $5 from each student who takes the dissecting ticket.	
BENJAMIN WHITE,	Janitor, who receives $16 per month during lecture term.	

For names of Curators, see printed circular herewith transmitted.

3. *Number of Students.*

The whole number of students who attended the regular courses of instruction during the said year was 58.

The number of graduates at the last commencement, held on the 29th day of June, 1849, was 13.

The ages of the students attending during said year, were in no case less than 18. None of the graduates were under 21 years of age, and the average at the last commencement was 24.

4. *Classification of Students.*

The students attending said Medical Institution were classed as follows:

Number attending their first course of lectures,	34
" " " second " "	15
" " " third " "	5
Graduates in Medicine,	4

5. *College terms or sessions.*

There has been but one term or session during said year, which began on the second Tuesday of March, and ended on the twenty-ninth day of June.

6. *Mode of instruction.*

The course of instruction consists of daily lectures, and examinations on preceding lectures by the several Professors, in their respective departments, averaging five lectures daily.

A dissertation on some medical subject is required of the candidate for graduation, who is privately examined by the Faculty, and afterwards by the Faculty and Curators, on whose recommendation the degree is conferred by the Trustees.

7. *Discipline.*

There are no established rules of discipline: general propriety and decorum are required of the students.

8. *Gratuitous aid.*

Three students have received tickets on the recommendation of the censors of the State Medical Society, in compliance with the provisions of the Legislature endowing this department. Persons preparing for missionaries, and clergymen, are admitted to the lectures gratuitously, and one individual of the latter class has been in attendance during the last session.

9. *Statutes and By-Laws of the Institution.*

Same as heretofore reported.

10. *Description and value of College building.*

For description of building see former report.

Building lot cost $1,277 ; the college building was erected at an expense of $14,772 ; the library consists of 697 volumes, most of which are in a good state of preservation ; its estimated value is $1,300 ; the anatomical museum consists of specimens of healthy and morbid anatomy, casts, models and manakin, and wax preparations, valued at $1,002 ; the collection purchased of Dr. Rogers for $636, and the collection obtained of Dr. Francis for $1,200 ; a part of the chemical apparatus belongs to the Professor of Chemistry ; the portion belonging to the institution was purchased for $1,050 ; the materia medica collection is estimated at $120.

Value of lot and building,	$16,049
Library,	1,300
Anatomical museum,	2,838
Chemical apparatus,	1,050
Materia medical collection,	120
	$21,257

11. *Description and value of other college property.*

There remains due on Trustees bond,	$3,828 43
Other debts due to the institution, estimated at	400 00
In the hands of the register,	84 76
	$4,313 19

12. *Revenue.*

Annual grant from the State,	$1,000 00
On bond of Trustees,	500 00
Matriculation fees collected,	89 50
Graduation fees collected,	190 00
Rent,	13 00
	$1,792 50

13. *Debts.*

There are debts against the institution amounting to about $400 00

14. *Income and Expenditure.*

The whole income of the institution as stated in article 12th, is		$1,792 50
The whole expenditure of the past year consists of the following items:		
On mortgage of Dr. Coventry,	$441 11	
Other debts,	390 01	
Expense of Anatomical department,	206 90	
Furniture for Museum room,	65 93	
Incidental expenses,	225 77	
Printing and advertising,	23 65	

Books and periodicals,	$25 90	
Repairs on building and painting,	89 63	
Expense of Cliniques,	40 96	
Expense of commencement,	60 00	
Janitor's wages,	60 50	
Rent,	37 21	
		1,707 74
Balance in favor of the institution,		$84 76

CHARLES ALFRED LEE,
Dean of the Faculty.

GENEVA MED. COLLEGE.
Dec. 29, 1849.

The above report has been prepared by the undersigned, by order of the Trustees of Geneva College, and is respectfully submitted.

BENJ. HALE,
WM. S. DE ZENG,
Committee.

5. UNIVERSITY OF THE CITY OF NEW-YORK.

To the Regents of the University of the State of New-York:

The annual report of the council of the University of the city of New-York, for the last collegiate year, ending on the 27th of June, A. D. 1849.

1. *Number and description of Professors.*

THEODORE FRELINGHUYSEN, Chancellor and Professor of Moral and Political Philosophy and Rhetoric.

CYRUS MASON, D. D., Professor of the Evidences of Revealed Religion, and who also lectures on political economy.

TAYLOR LEWIS, L. L. D., Professor of the Greek language and Literature.

E. A. JOHNSON, A. M., Professor of the Latin language and Literature.

C. S. HENRY, D. D., Professor of Intellectual Philosophy, History and Belles Lettres.

JOHN W. DRAPER, M. D., Professor of Chemistry and Natural History.

CHARLES DAVIES, A. M. Professor of Mathematics, Natural Philosophy and Astronomy.

The above constitute the governing Faculty.

Professors of the Modern Languages.

M. GIRAUD, Professor of the French language.

FELIX FORESTI, Professor of the Italian language.

G. F. ADLER, Professor of the German language.

F. I. VINGIBT, Professor of the Spanish language.

The salary of the Chancellor is three thousand dollars per annum, and of the Professors, one thousand dollars each, per annum, and seven dollars for each paying student : making nearly the sum of one thousand five hundred dollars. Professor Mason is not included in this statement, whose professorship is endowed and produces in salary nine hundred dollars a year.

There is no other officer connected with the University in government or in tuition. There is a Janitor at a salary of five hundred dollars a year.

Number of Students.

The number attending the regular course of instruction during said year, was one hundred and thirty-five. The number of graduates at the last commencement was twenty-seven. The last commencement was held on the 27th day of June, A. D., 1849.

No students is received into college, under fourteen years of age.

Classification of Students.

Seniors,	31
Juniors,	40
Sophomore,	30
Freshman,	32
	135

There are three college terms, viz:

1. From the third Wednesday of September to the 24th of December. 2. From the first Monday of January to the first Monday of April. 3. From the 3d Monday of April to the last Wednesday of June.

The vacations were the week of the holydays, two weeks in April, and the months of July and August, and up to the third Wednesday of September.

Mode of instruction.

The mode of instruction was chiefly by analysis and recitation from text books. In chemistry, the course of instruction combined a text book and lectures, the students taking notes, with daily examinations. Also in natural philosophy, astronomy and criticism, and likewise in natural theology. Moral and political philosophy lectures are given, occasionally for the whole term, and often blending with the recitation from the text book.

Discipline.

The discipline is conducted upon the principles of paternal government, as heretofore reported, with reports sent at each term, of the attainments and standing of each student. A yearly record is kept by the Faculty of the grade of merit of each student for the year, in a book kept for that purpose. Three lectures a day are required, of an hour each, with three several Professors, except on Saturday, when public declamations in the chapel are attended to.

Gratuitous aid.

The number of free scholarships through the year, amounted to fifty.

The By-Laws

Of the University remain unchanged, and as reported at the last year.

The real estate of the University is the college edifice on Washington Square, valued at	$260,000
The philosophical apparatus, do,	10,000
The library, do,	7,000
	$277,000

They have no other property.

Revenue.

From October 1, 1848, to October 1, 1849.

From the State,		$1,500 00
Fees of Medical graduates,		2,840 00
Fees of undergraduates,	$6,286 64	
Of which anticipated *for last year*,	2,928 54	
		3,358 10
Back fees,		35 00
Rents,		3,726 50
Interest on $31,000, conditional subscription, for six months,		1,085 00
		$12,544 60

Debts.

The permanent debt is	$74,906 93
The floating debt,	6,214 47
	$81,121 40

This amount does not include the endowment of the Professorship of the Evidences of Revealed religion, of fifteen thousand dollars, secured by mortgage at six per cent. to be paid to such Professor annually, and which is met and liquidated by the yearly salary of nine hundred dollars, paid to Professor Mason, in that department. Of the *debt*, forty thousand dollars has been subscribed, on condition that the whole debt is raised: the subscribers agree to pay interest on $31,000 for five years from 1st of April last.

Income was	$12,544 60

The expenditures were,

For salaries,	$11,760 20
Interest on debt,	5,243 46
Incidentals, insurance, fuel, light, repairs, &c.,	1,380 41
	$18,384 07

The three higher classes regularly attended to weekly declamation on Saturday with the Chancellor, in the chapel, and to English and forensic exercises in writing; the Juniors and Sophomores with Professor Henry, and the Freshman class to declamation with Professor Johnson, in his lecture room.

The Seniors and Juniors write and speak their own declamations.

The two literary societies held, as usual, their weekly meetings for literary discussions, speaking and English composition.

The daily religious service in the chapel, for half an hour before the lectures, has been punctually attended.

All the classes were publicly examined in March and June last.

The Medical department maintains its reputation, as will appear by its report to the Council, and hereto annexed. The graduates of the past year amount to 142. The present number of students, 404.

The Grammar school enjoyed its accustomed share of patronage, as its annual report to the Regents will fully explain. The whole number of its pupils was one hundred and ninety-seven.

The price of tuition is eighty dollars a year, and ten dollars for incidentals, payable half yearly in two equal payments.

General Remarks.

The conduct of the students the past collegiate year, was orderly and diligent; there was no serious case of disorder.

The modern languages are taught by competent Professors, provided by the Council to all students who may wish to learn them.

The *Senior class* read Paley's and Wayland's Moral and Political Philosophy, Story on the Constitution of the U. S., and Whately's Rhetoric with the Chancellor. Rauch's Psychology with Prof. Henry. Draper's Chemistry, Lyell's Geology, Henslow's Botany, with Prof. Draper. Plato's 10th book of Laws with Prof. Lewis, and Cicero's Tusculan discussions, book 5, with Prof. Johnson.

The *Junior class* read Olmsted's Astronomy and Natural Philosophy, with Prof. Davies ; Whately's Logic with Prof. Henry and lectures; Plato's Gorgias with Prof. Lewis; Cicero's Tusculan Discussions, books 1, 2, 3, with Prof. Johnson; Paley's Evidences of Revealed Religion and Mills' Political Economy with Prof. Mason.

The *Sophomore class* read Euripides and Lucian with Prof. Lewis and Horace, Cicero and Terence with Prof. Johnson. Loomis' Algebra and Geometry and Davies' Trigonometry and Surveying with Prof. Davies.

The *Freshman class* read Homer's Odyssey and Herodotus with Prof. Lewis; Cicero, Horace and Livy with Prof. Johnson, and Loomis' Algebra and Davies' Legendre, with Prof. Davies.

The present number of undergraduates is one hundred and ten.

University of the City of New-York,
January 30, 1850.

At a meeting of the Council of the University of the city of New-York, it was resolved that the foregoing report be entered on record and transmitted to the Regents of the University of the State of New-York. As witness, the hand of the President and the seal of the Council.

[L. S.] CHARLES BUTLER,
President, &c.

REPORT OF THE MEDICAL FACULTY TO THE COUNCIL OF THE UNIVERSITY OF THE CITY OF NEW-YORK.

The Medical Faculty respectfully present to the Council the following report of the Medical Department.

1. *Number and description of Professorships.*

1. Professorship of the Principles and Operations of Surgery, with Surgical and Pathological Anatomy.
2. Professorship of General, Descriptive, and Surgical Anatomy
3. Professorship of the Theory and Practice of Medicine.
4. Professorship of the Institutes of Medicine, and Materia Medica.
5. Professorship of Midwifery, and diseases of women and children.
6. Professorship of Chemistry.

2. *Faculty and other College Officers.*

The Faculty of the Medical Department, including all persons charged with the duty of giving public instruction therein, are

Valentine Mott, M. D., Professor of Surgery.
Granville Sharpe Pattison, M, D , Professor of Anatomy.
Samuel Henry Dickson, M. D., Professor of Medicine.
Martyn Paine, M. D., Professor of Institutes and Materia Medica.
Gunning S. Bedford, M. D., Professor of Midwifery.
John W. Draper, M. D., Professor ot Chemistry.

3. *Number of Students.*

Whole number of students during the present session,--------	404
Number of graduates since the last report,-----------------	142

It is believed that none of the students are under the age of 18 years.

The age of the graduates being required by law to be 21 year none have been admitted to the degree under that age.

4. *Classification of Students.*

There is no classification of students.

5. *College term or session.*

The term of study begins on the last Monday in October, and ends on the last day of February. But there is also a gratuitous course for those who are disposed to avail themselves of it, beginning on the eighth of October and ending on the last Monday of the same month. Daily instruction in practical Anatomy is given from the first Monday in October to the first of April, a period of six months. Clinical lectures are also given every Saturday throughout the year.

6. *Mode of instruction.*

The mode of instruction is by lectures, and the only examinations are those for admission to the degree. They take place at the close of the winter session, and in the month of May.

7. *Discipline.*

There are no special rules of discipline. General propriety and decorum are required. No punishments have been inflicted.

8. *Gratuitous aid.*

Ten students are annually admitted as beneficiaries, on the payment of the sum of twenty dollars.

9. *Statutes or By-laws.*

There are no statutes or by-laws of the Medical department.

10. *College buildings and other property.*

The Faculty purchased, unaided by the State or public, the building in Broadway, which they occupy as a College. The expense of its repair, and putting it in suitable condition, was about $60,000; but there are mortgages still remaining on it to the amount of $47,000, bearing an interest at 7 per cent per annum. This purchase was made because the Faculty found it impossible to carry on dissection and medical instruction generally in a rented edifice. It involved responsibilities so seriously oppressive, that the Faculty, in 1844, were obliged to apply to the Legislature for a grant to enable them to pay the current interest on the mortgages. These grants, although no inconsiderable part of them has been applied to the purchase and support of museums, have contributed greatly to the relief of the Faculty, in their partial operation, as a substitute for that provision of a Medical edifice, which is almost invariably supplied by the State towards the institution of Medical schools.

11. *Revenue.*

The revenue consists of

A matriculation fee from each student,	$5 00
A graduate fee,	30 00
Fees for one full course of lectures,	105 00

The Medical Department has received, since the last report, its grant from the Legislature, of $1,000. It has been appropriated towards the payment of interest on the mortgages.

Of the graduation fee, $20 are paid by the Medical Faculty to the Council of the University.

12. *Debts.*

The debt upon the college property is $47,000, as stated in the 10th article.

Remarks.

Patients laboring under medical and surgical diseases, and who are unable to pay for professional advice, are received at the college building every Saturday throughout the year. This clinique is under the charge of Dr. Mott, who attends personally, and prescribes for the poor who may apply for aid. The patients are provided with medicine at the expense of the Medical Faculty. From fifty to seventy persons are prescribed for every week. There is also connected with the Institution a Lying-in-charity, under the care of Dr. Bedford; nearly 400 poor women are attended annually, in their confinement, free of charge.

By order of the Medical Faculty.

JOHN W. DRAPER,
Secretary.

January 29th, 1850.

6. MADISON UNIVERSITY.

The Trustees of Madison University respectfully present the following report to the Regents of the University of the State of New-York :

1. *Number and description of Professorships.*

During the academical year, ending August 15, 1849, there were in the University the following professorships :

1. Of the Evidences of Natural and Revealed Religion.
2. Of the Hebrew Language and Literature.
3. Of Civil History.
4. Of the Greek Language and Literature.
5. Of the Latin Language and Literature.
6. Of Rhetoric and Belles Lettres.
7. Of Mathematics and Natural Philosophy.
8. An adjunct Professorship of Hebrew.

2. *Faculty and other College Officers.*

Rev. J. S. Maginnis, D. D., Prof. Evidences of Natural and Revealed Religion.
Rev. T. J. Conant, D. D., Prof. Hebrew Language and Literature.
Rev. G. W. Eaton, D. D., Prof. Civil History.
Rev. A. C. Kendrick, D. D., Prof. Greek Language and Literature.
J. F. Richardson, A. M., Prof. Latin Language and Literature.
J. H. Raymond, A. M., Prof. Rhetoric and Belles Lettres.
P. B. Spear, A. M., adjunct Prof. of Hebrew and Principal of the Grammar School.
Hezekiah Harvey, A. M., Tutor in Philology.

The other officers, servants, &c., consisted of a librarian, an assistant librarian, a clerk to the Board of Trustees, a treasurer, a registrar and steward, and three bell ringers.

3. *Number of students.*

Whole number of under graduates during the year,	111
Dismissed during the year,	25
Number remaining at the close of the year,	86
Number of graduates at the last commencement,	17
Whole number of graduates from college,	230

4. *Classification of Students.*

The students were classed as follows :

Seniors,	29
Juniors,	34
Sophomore,	22
Freshmen,	26
	111

No student was under fourteen years of age. The average age of the members of the graduating class was twenty-four.

5. *College Terms or Sessions.*

The same as when last reported.

6. *Subjects or Course of Study.*

SENIORS.

Intellectual and Moral Philosophy, Natural Theology, and Evidences of Christianity, under Prof. Eaton.

Greek Language and Literature, under Prof. Kendrick.
French and German Languages, " " "
Latin Language and Literature, " " Richardson.
History of Literature, " " Raymond.
Hebrew Language and Literature, " " Conant.
Lectures and Experiments in Chemistry, under Dr. Mather.

Text-Books.—Upham, Wayland, Butler and Paley ; Xenophon's Memorabilia and Plato's Phædon ; French and German Readers ; Cicero de Officiis; Schlegel; Hebrew Bible; Johnston.

JUNIORS.

Natural Philosophy and Astronomy, under Prof. Raymond.
Greek Lang. and Lit. of the Greek Drama, under Prof. Kendrick.
Latin Language and Literature, under Prof. Richardson.
German Language, " " "
Logic and Elements of Criticism, " " Raymond.
Chemistry, " " Dr. Mather.

Text-Books.—Olmsted ; Sophocles and Æschylus ; Horace and Cicero de Officiis; Adler's German Grammar and Reader; Whateley and Kames; Johnston.

SOPHOMORES.

Greek, under Prof. Kendrick.
Latin, " " Richardson.
General Grammar and Rhetoric, under Prof. Raymond.
Mathematics, " " "

Text-Books.—Æschines and Demosthenes; Terence and Tacitus; De Sacy and Whateley; Jackson's Conic Sections, Davies' Legendre, Trigonometry and Surveying.

FRESHMEN.

Latin Lang. and Rom. Antiquities,	under	Prof. Richardson.
Greek Lang. and Antiquities,	"	Tutor Hawey.
Mathematics,	"	Prof. Spear.

Text Books.—Livy and Virgil, Homer, Davies' Bourdon and Legendre.

Under the several heads of:

7. *Exercises.*
8. *Examinations.*
9. *Mode of instruction.*
10. *System of discipline.*
11. *Gratuitous aid.*
12. *Statutes and by-laws of the College.*
13. *Description and value of College buildings.*
14. *Description and value of other College property.*

The Trustees have no modification to make of what has been communicated in former reports.

15. *Revenue.*

During the financial year ending Nov. 10, 1849, the revenue was as follows:

From the State,	$3,000 00
From tuition fees,	2,948 01
From the patrons of the University,	1,693 68
Interest on Permanent Fund of Ed. Society,	483 00
	$8,124 69

16. *Debts.*

The Board are free from debt.

17. *Income and Expenditures.*

Income as above stated,		$8,124 69
Expenditures as follows:		
For sallaries of Officers, &c.,	$7,690 63	
For incidentals, repairs, &c.,	434 06	
		8,124 69

18. *The Price of Tuition.*

Is thirty dollars a year.

All which is respectfully submitted.

S. B. BURCHARD,
Chairman of the Prov. Com.

HENRY TOWER,
Treasurer.

7. ST. JOHN'S COLLEGE, FORDHAM.

To the Regents of the University of the State of New-York:

The Trustees of St. John's College, Fordham, in compliance with the requisition of the Regents of the University, submit the following report for the last collegiate year, ending on the 15th day of July, 1849, containing a just and true statement of facts; showing the progress and condition of said college, in respect to the several subject matters following, viz :

1. *Number and description of Professorships.*

2. *Faculty and other College Officers.*

The Faculty of St. John's College, including all persons charged with the duty of giving public instruction therein during the year, consisted of a President, a Vice President, eleven Professors and three Tutors. The other officers charged with duties other than those of public instruction during the year, were a Chief Disciplinarian and four Prefects, watching constantly day and night over the pupils.

The names of the several persons holding offices or places in the college during the year, with the offices or places held by them respectively, are as follows :

Rev. A. I. Thebaud, President, Professor of French Literature.
Wm. S. Murphy, Vice President, Professor of English Literature and Greek.
J. Daubresse, Professor of Logic and Metaphysics.
John Ryan, 1st Professor of Latin.
Mr. J. E. Doucet, 2d Professor of Latin.
Rev. Julius Pottgeisser, Professor of Natural Philosophy and Mathematics.
H. Duvanquet, Assistant Professor of Mathematics.
Paul Mignard, Professor of French.
Mr. James Weger, Professor of German.
John Shea, Assistant Professor of English Literature.
A. Hudon, Tutor in Greek, Latin, English and Arithmetic.
James M. Graves, Tutor in Latin, English and Arithmetic.
Wm. Rodrigue, Professor of Drawing.
Hector Glackmeyer, Tutor of Preparatory Class.
Rev. A. Regnier, Chief Disciplinarian, with four Prefects.

These gentlemen, with one or two exceptions, being associated from conscientious motives, and devoting their time and exertions to the cause of education, live together, receive no salary, and are contented with their ordinary expenses being paid by the treasurer. These are estimated by him, in the aggregate, at $3,700.

3. *Number of Students.*

The whole number of students, undergraduates, in the college was 66; of whom, 3 left during the year; remained at the end of the year, 63. There were 9 graduates at the last annual commencement.

Of other students, not undergraduates, there were during the year:

1st. In the Grammar classes,	50
2d. In the preparatory classes,	52
Undergraduates, as above,	63
	165

Several students of the grammar and preparatory classes left during the year, so that the average number was 145.

The number of students, at the date of this report, is 160.

4. *Classification of Students.*

The students, undergraduates, were classified as follows, viz:

First class, or Philosophy,	15
Second class, or Rhetoric,	19
Third class, or Belles-Lettres,	14
Fourth class, or Classics,	18

This division corresponds to the distinctive appellations of Senior, Junior, &c., elsewhere adopted.

5. *College Terms.*

There was but one term or session for study in the college during the year, beginning on the first Monday of September, 1848, and ending on the 15th day of July, 1849, with a recess of a week at Christmas and Easter.

6. *Subjects or courses of Study.*

The sub-graduate course of study in each class during the year was as follows:

1st Class, or Philosophy.

This class attended the Professor of Logic and Metaphysics during one hour, seven times a week, throughout the year. The course comprised Logic, Ontology, Natural Theology, and Psychology. The lectures were delivered in Latin. The students took notes, and were allowed to ask explanations, but always using that language. Twice a week the subject matter of the day was reviewed, during one hour, by the students, under the supervision of the Professor, each in turn briefly stating the subject, the others arguing against the respondent. Once a week, a lecture was delivered in English on the History of Philosophy.

The Professor of Natural Philosophy and Mathematics taught during an hour six times a week. In Natural Philosophy, the students went through Mechanics, Hydrostatics, Pneumatics, Electricity, Magnetism and Optics. The lessons of the Professor were not confined to the experimental branches merely, but embraced also demonstrations of every principle and law by Elementary Mathematics. Heretofore these demonstrations were generally based on the process of Calculus. The celebrated Cauchy of Paris, communicated by private letter to the Professor, a new and admirable method, by which all the important laws of Mechanics, Optics, &c., can be demonstrated with the aid of Elementary Mathematics.

The class attended the Professor six hours every week throughout the year for instruction in Mathematics. After reviewing briefly the general theory of Equations, the whole of Davies' Calculus, Differential and Integral, was read.

The study of Botany, commenced last year, was carried on with increased activity during the proper season. There were two lessons weekly. As soon as the students had been made perfectly acquainted with the Linnæan system, they regularly devoted a part of their recreation day to herborizing in the Bronx valley. Additions were made to the conservatory, as well as to the collection of American plants cultivated in the botanic garden of the college. These plants, properly grouped and classed respectively, served to illustrate to the students the systems of Jussieu, De Candolle, and Lindley, contrasted with other more artificial, but less esteemed methods.

The class of Philosophy united with the students of Rhetoric, form an Academical society, under the supervision of the Professor of English Literature. This society met once a week for exercise in declamation, public speaking, essays, &c. At every meeting English compositions were read, or discourses delivered on given subjects by those who had been appointed at the previous meeting. In this manner each appeared in his turn before his fellow members in the capacity of orator or essayist; and distinguished success pointed out those who were chosen to come before the public in the three academical debates, which took place during the year, to the satisfaction of all present.

2d Class or Rhetoric.

This class attended the Professor of Chemistry during one hour twice a week throughout the year. The preliminary study of heat, &c., was followed by Chemistry proper. The text book in the hands of the students was Alonzo Gray's Chemistry. The Professor, however, did not confine himself to the text book. Whatever is most clear and useful in the best English and French authors was embodied in his lectures. Thenard, Brande, Dumas, &c., were quoted in illustration of every important matter. The students themselves, under the Professor's supervision, performed a great number of interesting and useful experiments, in order to their becoming acquainted with chemical manipulation. In the experimental as well as the theoretical part of Chemistry, every opportunity was taken to point out the applications of this science to medicine, metallurgy, agriculture, and to arts and manufactures in general.

Towards the end of the year Geology and Astronomy were taught and illustrated in a series of lectures. This class attended the Assistant Professor of Mathematics five times a week throughout the year. They began with Trigonometry and then went through the first seven books of Davies' Analytical Geometry.

The number of exercises devoted to the classics, in rhetoric, during the year, was as follows :

Tacitus, Germania, &c.,	25
Dialogue *De Oratoribus*,	50
Conciones, or Harangues of Livy, Sallust, &c.,	100
Juvenal,	45
Demosthenes,	100
Minor Greek Poets,	20
Euripides,	50
Latin Exercises, prose and verse,	178

Besides the usual verbal translation and recitation, written versions were frequently required and studiously compared with the originals. This exercise has been found remarkably conducive to the acquiring of a happy command of language, and a concise, nervous English style, to say nothing of sound classical knowledge.

This class attended the Professor of English Literature five times a week. Besides occasional lectures by the Professor, and the critical examination of the discourses handed in weekly by the pupils. Blair, and other approved authors, were studied and commented; the ancient treatises were illustrated by comparison with English models, and these were continually read side by side with the Latin and Greek orations, explained in the classical course. Proficiency in elocution and composition was throughout aimed at, and by the majority, satisfactorily attained. Of this result public evidence was repeatedly given in the academical debates referred to above.

French, four lessons weekly.

3d Class or Belles Lettres.

Number of classical exercises during the year:

Cicero's Orations,	40
Livy,	60
Horace,	90
Thucydides,	45
Homer,	45
Sophocles,	50
Latin exercise, prose and verse,	150

Three times a week, besides the recitation and written analysis of approved treatises by the students, lectures were delivered with a practical application of principles, by the Professor. English composition, except in oratory, was particularly attended to throughout, and with the happiest result.

There was also a regular course of modern history.

This class took five lessons of French weekly, during the year. Besides the grammatical exercises, they wrote French compositions twice a week, and committed to memory extracts from the best authors. Moreover, the Professor dictated a treatise on the *Principes de la Litterature Francaise*, compiled from approved authors.

This class also attended the Assistant Professor of Mathematics, during an hour five times a week. Legendre's Geometry and Davies' Surveying were read ; and during the summer months, the students, under the direction of the Professor, surveyed a part of the college grounds.

4th Class or Classics.

The number of exercises devoted by this class to the study of classics, during the year, was as follows :

Virgil,	Eclogues,	75
	Georgics,	25
	Æneid,	150
Sallust,		150
Xenophon,		200
Greek Poetical Extracts,		75
Latin Exercises,		350
Greek do		300

The Historical course comprised Rome and England.

This class attended the Assistant Professor of Mathematics five times a week, during the whole year for the study of Algebra.

Davies' Bourdon was their text-book. The course of Algebra comprised: 1st, Rules and Fractions ; Equations of the 1st degree with one or more unknown quantities, Indeterminate equations, Theory of negative quantities, Inequalities, Extraction of the square root, Calculus of Radicals, Complete Equations of the 2d degree; Discussion of do., Extraction of the square root of binomial surds, Equations of the 2d degree with two or more unknown quantities.

The French course in this class was similar to that taught in the Belles-Lettres Class, with the exception of the treatise dictated on French Literature.

7. *Exercises.*

Besides the Rhetorical exercises belonging to the two first classes, as has been already reported, there were in the other classes weekly exercises in elocution and composition. Parker's work was used for the latter purpose. In the Grammar and Preparatory classes, particular attention was paid to pronunciation, spelling, and letter-writing as well as to the study of French grammar and conversation.

8. *Examination.*

There was in the College, as usual, a general examination previous to the annual commencement To prepare for it, half of the class time, during the last two months, is devoted to a general review of the most important branches studied during the year. The examination embraces only such matters as have been reviewed in the different classes.

9. *Mode of instruction.*

This has been sufficiently stated in the details given on the course of study.

10. *Discipline.*

All the students of St. John's College being boarded, the efforts of its conductors are constantly and conscientiously directed to ensure the moral improvement, even more than the literary progress of the pupils. They have thought from the beginning, that a College can be regulated as a large family, The mild influence of religion is considered as the best means of governing paternally such an institution ; and they are happy to state that the experience of every succeeding year realizes their expectations.

The younger pupils are sometimes deprived of a part of their recreation, or obliged to learn during that time, the lesson they had neglected. In much less frequent occurrences, when other punishments have no effect, and the consent of parents is obtained, corporal punishment is used as a last resort.

11. *Gratuitous aid.*

No provision has ever been made in the College for the gratuitous education of indigent students, and considering the circumstances of its foundation, none could be made ; yet, out of purely benevolent motives, the expenses of several students have been diminished by a deduction in the price of board, &c,

12. *Statutes or By-laws.*

These are very few, and of a very simple character, relating chiefly to propriety and decorum, subordination and general deportment. What has already been stated on the discipline of the College can give a just idea of them.

13. *Description and value of College Buildings.*

1. The College Buildings consist of 1st, a main stone building, containing the private College chapel, parlor, library, museum, and rooms of professors and officers. 2d. Two wings containing, on one side, the refectory of the students, kitchen, bakery, &c.; on the other side, the study hall, seven recitation rooms, music and drawing schools, &c. 3d. Connected with the rest by a long passage is a large brick building for the dormitories, play-rooms and wash-rooms of the students. To this a very large addition has just been made. 4th. A frame building for the use of workmen, waiters, farmers, &c. 5th. Another frame building, containing the infirmary, wardrobe, &c.

The college is built on a farm of about 100 acres, extending from the Harlem railroad to the Bronx river.

2. The various libraries of the college contain nearly 10,000 volumes of theology, philosophy and sciences, history and literature. Nearly all are bound and well preserved.

3. All the apparatus necessary for a complete course of experimental natural philosophy, the college possesses.

4. The mineralogical cabinet contains, 1st, a collection of 1,200 specimens of nearly all the mineralogical species, arranged for study. 2d, a collection of 600 specimens, classed for the study of geology. 3d, a collection of 250 specimens of the most interesting minerals of New-York and the neighboring States. 4th, a collection of 400 fossils and other specimens of minerals from Kentucky and the mammoth cave.

5. In the conservatory of the college are cultivated upwards of 500 different species of exotics, their number increasing daily.

6. A collection of shells, reptiles and insects has been commenced.

First cost of building,	$29,750 00
Putting house in order,	12,000 00
Buildings additional,	25,000 00
Library and furniture,	15,000 00
Carried forward,	81,750 00

Brought over,		81,750 00
Farm and stock,		30,000 00
Addition to apparatus in 1846,	$4,000 00	
do library, in 1846,	4,000 00	
Mineralogical cabinet,	2,000 00	
		10,000 000
Addition to dormitory, 1849,		1,500 00
		$123,250 00

14. *Other college property.*

None.

15. *Revenue.*

The only source of revenue is the amount paid by the students annually, at the rate of $200 for board, tuition, washing, &c.

16. *Debts.*

The debt of $37,000, stated in last report, has been reduced to $35,000, by the payment of $2,000 out of the $2,500 granted by the Legislature. The balance of this appropriation, $500, went towards the cost of addition to dormitory above mentioned.

17. *Income and expenditure.*

St. John's College being a large establishment, where about 250 persons, including Professors, students, officers and servants are supported, it would be too long to give in detail the expenses necessary for such an aggregate. From what has been stated of the number of students during the year, and of the only source of revenue enjoyed by the college, the income may be inferred. Suffice it to say, that a surplus of $1,000 paid the balance of expenses for the new building.

Price of tuition.

Already reported.

Remarks.

In order to correct an erroneous impression which partially prevailed in the Legislature last year, the Trustees beg leave to state that the college is totally distinct from the Theological Seminary situated in its immediate neighborhood. The ten acres attached to the latter form no part of the property under the control of the corporation; nor has one dollar of the annual grant been applied by them to that establishment.

A draft of the report was read at a meeting of the Trustees of St. John's College, held on the 31st day of January, 1850, the report in its present form was unanimously adopted, and the President, Secretary and Treasurer were commissioned to have it transcribed, to sign it, and to affix the corporate seal thereto.

P. A. HARGOUS, *Pres. of Board,*
F. FOUCHE, *Treasurer,*
W. S. MURPHY, *Secretary.*

8. COLLEGE OF PHYSICIANS AND SURGEONS IN THE CITY OF NEW-YORK,—ANNUAL REPORT.

To the the Regents of the University of the State of New-York:

The Trustees of the College of Physicians and Surgeons in the city of New-York, in compliance with a requisition of the Regents of the University, submit the following report for the last Collegiate year, ending on the 31st day of December, 1849, containing a just and true statement of facts, showing the progress and condition of said College during and at the close of said year, in respect to the several subject matters following, viz:

I.

Number and description of Professorships.

The Professorships in said College during said year were the following:

1. Principles and Practice of Surgery and Surgical Anatomy.
2. Theory and Practice of Medicine and Clinical Medicine.
3. Obstetrics and the diseases of women and children.
4. Materia Medica, and Medical Jurisprudence.
5. Chemistry and Botany,
6. Anatomy.
7. Physiology and Pathology.

II.

Faculty and other College officers.

The Faculty of said College including all persons charged with the duties of giving public instruction therein, during said year, consisted of a President, who is also Emeritus Professor of Surgery; one Professor for each of the seven Professorships enumerated in the preceding article, and a Demonstrator of Anatomy.

The other officers and servants of said College, charged with duties therein other than those of public instruction during said year, were a Vice President, a Treasurer, a Registrar, a Librarian, a Curator and a Janitor.

The names of the several persons holding offices or places in said College during said year, with the offices or places held by them respectively, and the salaries or annual compensation for official services allowed to each of them were as follows:

Names of Persons.	Professorships or other offices held.	Salary.
A. H. STEVENS, M. D.,	President and Emeritus Professor of Surgery,- - - - - - - - - - - - - - -	
Prof. J. M. SMITH,	Theory and Practice of Medicine and Clinical Medicine,- - - - - -	Fees.
" JOHN B. BECK,	Materia Medica, and Medical Jurisprudence,- - - - - - - - - - - - - -	"
" JOHN TORREY,	Chemistry and Botany,- - - - - - - -	"
" ROBERT WATTS, jr.	Anatomy,- - - - - - - - - - - - - - - - - - - -	"
" WILLARD PARKER,	Principles and Practice of Surgery and Surgical Anatomy,- -	"
" CHANDLER R. GILMAN,	Obstetrics and diseases of women and children,- - - - - - - - - - - - - -	"
" ALONZO CLARK,	Physiology and Pathology,- - - -	"
Dr. CHARLES E. ISAACS,	Demonstrator of Anatomy,- - - - -	"
Dr. THOMAS COCK,	Vice President.	
FLOYD SMITH, Esq.,	Treasurer.	
Dr. GURDON BUCK, jr.,	Register.	
Dr. CHAS. E. ISAACS,	Curator of College Museum,- - -	$50
JOHN J. HIGGINS, A. B.,	Acting Librarian.	
JAMES KNOX,	Janitor, -	$250

III.

Number of Students.

The whole number of Matriculated Students, Undergraduates attending the regular course of instruction during said year, was 208. The number of Graduates at the last annual commencement in March was 39. At the Fall commencement 6. Total 45. The ages of the students attending during said year were over 14 and generally about 21 years. The ages of the graduates being required by law to be 21 years, none have been admitted to the degree under that age; and the average age of the graduates at the last commencement was probably 23 years.

IV.

Classification of students.

The students attending said College are not classified.

V.

College term or sessions.

There is only one term or session in each year in said College, for the sub-graduate course, which commenced the past year on the 15th day of October 1849, and will continue until the 14th day of March 1850.

In addition to the regular course, a preliminary free course of lectures was commenced on the 1st day of October, and continued until the 15th, embracing the following subjects.

Hygeine, by Dr. SMITH.
Anatomy of the Heart and Large Vessels, by Dr. WATTS.
Diseases of the Male Genital Apparatus, by Dr. PARKER.
Organic Diseases of the Uterus, by Dr. GILMAN.

VI.

Mode of instruction.

The mode of instruction in said college is that of public lectures, by the several Professors, on the subjects of their respective professorships. Several of the Professors examine the members of their class on the subject of the preceding lectures, which is designed rather as a means of instruction, than as a test of the acquirements of the student. Of the latter description of examinations, candidates for degrees are required to submit to two ; one before the Professors, the other before the Trustees, who thereupon decide respecting the qualifications of such candidate.

VII.

Discipline.

There are no established rules of discipline ; general propriety and decorum are required.

VIII.

Gratuitous aid.

Gratuitous students are not admitted by us of right, but students of theology and missionaries are allowed to attend all the lectures.

Indigent medical students are admitted, under peculiar circumstances, on easy conditions. The matriculation fee of five dollars, which is the property of the college, is required from all students, except such as have already paid for their matriculation tickets.

IX.

Statutes and By-Laws of the College.

The by-laws and regulations of the college are those approved by your honorable body on the 28th of February, 1814, a copy of which was transmitted with the annual report of 1847.

X.

Description and value of College building.

1. The college building, situated on Crosby-street, near Spring-street, is 75 feet in width, by 75 feet in depth, three stories high in front and four in the rear, and contains all the requisite accommodations for the different departments of instruction.

The building and ground pertaining thereto, may be valued at $30,000.

2. The college library contains about 1,200 volumes, valued at $1,500. The college also possesses a valuable cabinet of materia medica, the gift of Prof. J. B. Beck, anatomical preparations, wax and plaster models, drawings, &c., the value of which, with the cabinet of materia medica is not less than $3,500. Total amount of the above values, $35,000.

XI.

Description and value of College property.

The college possesses no other property or funds, besides what is enumerated in the last preceding article.

XII.

Revenue.

Annual grant from the State,	$500 00
Matriculation fees collected,	965 00
Graduation do	1,125 00
Rents collected,	343 00
Balance from last year,	347 62

XIII.

Debts.

Bond and mortgage to W. W. Fox, Esq, at 7 per ct.,	$12,500 00
do do Dr Albert Smith, do	5,000 00

XIV.

Income and expenditure.

The whole income of the college collected and collectable, is stated in Article XII., and amounts to ------		2,933 00
Which, with the balance on hand at the commencement of the year, of ------------------------------		347 62
Makes a total of ------------------------------		$3,280 62

The whole expenditure of the past year amounts to $2,418.13 and consists of the following items, viz:

Interest on mortgages,-----------------	$1,225 00	
Diplomas $135, Register $50, Janitor $250 Curator $50,---------------------	485 00	
Expenses at Albany, $53.26; Acting Librarian $5,-----------------------	58 26	
Insurance $67, Croton Water $25, Gas $35 93, -------------------------	127 93	
Painting $7.63, Gas fixtures $4 02, Cleaning $47.04---------------------	58 69	
Binding $5, Print frames for Cabinet Materia Medica $30.29,-----------------	35 29	
Repairs $255.14, Stove &c., $16.94,-----	272 08	
Discount $4,03, Sundries $5.97,---------	10 00	
Advertising $49.63, Printing $60.75,----	110 38	
Carpet for College Hall,---------------	35 50	
		$2,418 13
Leaving a balance in favor of the College at date, of Treasurer's Report January, 1850, of eight hundred and sixty-two dollars forty-nine cents.		$862 49

N. B. Interest on mortgages payable in Feb. and April amounts to $612 50.

XV.

Price of Tuition.

Matriculation Fee,	$5 00
Graduation Fee,	25 00
Full course by all Professors,	96 00

XVI.

Remarks.

Under this head the Trustees beg leave to submit the following communication made to them by the President at their meeting held 31st January inst.

" College of Physicians and Surgeons,
New-York Jan. 29th, 1850.

I submit to the Trustees, the following statement of the condition of the College. The number of students who have matriculated, is two hundred and eight, being a somewhat larger number than those of several preceding years. As heretofore their conduct has been entirely unexceptionable, no instance having occurred in which any discipline has been called for. Many of the former graduates occupy eminent stations in military and civil life; among our Professors are no fewer than five who have graduated at this school. The course of instruction has been rendered more extensive and complete by the establishment of the Professorship of Pathological Anatomy and Physiology, which is filled by Professor Clark with pre-eminent ability. In this College it is believed, alone of all the schools in the United States, is given a course in Medical Jurisprudence. Efforts are being made for the giving of instruction in comparative Anatomy which has most important bearings, not only upon human Anatomy as a philosophical study, and upon Physiology, but also upon the treatment of the diseases of domestic animals.

The restricted funds of the College have hitherto prevented any considerable increase in the College Museum beyond what has been given by liberal individuals. The private collections of the Professors are used for the instruction of the students, and with the public collection constitute a Museum of great value.

The Professor's fees have been reduced from the sum of $108 to $96. (One hundred and eight to ninety-six dollars.) The Trustees have already duly noticed the loss sustained in the decease of one of their number, Mr. Bruen. The late Chancellor of the University, Dr. Peter Wendell has also been taken from the Board over which he for so long a period presided. In him the College has lost a faithful friend ardently devoted to its interests.

I am happy to add that as heretofore the utmost harmony and good feeling has prevailed among the officers and students of the College.

Regarding well educated Physicians as among the best missionaries of education and philanthropy, independently of their relations to the health of our people on the one hand, and the unspeakable evils arising from the half-taught Physician on the other, the hope is entertained that the increasing efforts which this Institution has made to elevate the standard of Medical Education and which have secured the approbation of the Profession will not fail to secure for it also the fostering patronage of the State.

Respectfully submitted.
Signed A. H. STEVENS, *President.*

XVII.

Close of Report.

This annual report having been submitted at a special meeting of the Trustees of the College, held January 31st, 1850, by a committee of three appointed for the purpose, was adopted and ordered to be forwarded to the Regents with the signatures of the President and Registrar and the seal of the college affixed to it.

ALEX. H. STEVENS, M. D.,
President.

Gurdon Buck, Junr., M. D.,
Registrar, &c.

New-York, January 31, 1850.

9. ALBANY MEDICAL COLLEGE.

REPORT FOR THE YEAR ENDING JANUARY 22, 1850.

The Trustees and Faculty of the Albany Medical College, report as follows to the Regents:

1. *Number and description of Professorships.*

The professorships in said college during said year, as established by the trustees, were as follows:

A Professorship of the Principles and Practice of Surgery.
" " Theory and Practice of Medicine.
" " Materia Medica.
" " Obstetrics and Natural History.
" " Chemistry and Pharmacy.
" " Anatomy.
" " Institutes of Medicine.
" " Medical Jurisprudence.

2. *Faculty and other College officers.*

The Faculty of said college, including all persons charged with the duty of giving instruction therein, during said year, were the individuals holding the above eight professorships.

The names of the several individuals holding places in said college during said year, with the offices held by them respectively, and the salaries or annual compensation for official services allowed to each of them, were as follows:

	Per Student.
ALDEN MARCH, Professor of the Principles and Practice of Surgery,	$10 00
JAMES MCNAUGHTON, Professor of the Theory and Practice of Medicine,	10 00
T. ROMEYN BECK, Professor of Materia Medica,	8 00
EBENEZER EMMONS, Professor of Obstetrics and Natural History,	10 00
LEWIS C. BECK, Professor of Chemistry and Pharmacy,	10 00
JAMES H. ARMSBY, Professor of Anatomy,	12 00
THOMAS HUN, Professor of the Institutes of Medicine,	5 00
AMOS DEAN, Professor of Medical Jurisprudence,	5 00

3. *Whole number of Students.*

The whole number of students attending lectures during said year, was 96. For the names of said students, the Trustees respectfully refer to the accompanying printed catalogue.

The number of graduates at the close of the collegiate year, ending January 22d, 1850, was 24.

All the students were above 15 years, and the great majority averaged probably from 19 to 22 years of age.

4. *Classification of Students.*

There is no classification of students, further than that some are attending their first course, some their second, and some their third course of lectures.

5. *College Terms or Sessions.*

The term or session for studies in said college, during said year, commenced on the first Tuesday in October, 1849, and ended on the 22d of January, 1850.

6. *Subjects or courses of study.*

See No. 2.

7. *Exercises.*

Not applicable.

8 *and* 9. *Examinations and modes of Instruction.*

The mode of instruction is by lectures. The Professors daily examine such of the students as desire it, on the subject of the lectures of the preceding day.

Candidates for graduation are examined by each Professor on the branch which he has taught. They are also examined before the Faculty and Curators.

10. *Discipline.*

The Faculty exercise the power of expulsion for crimes or other gross offences of any description. The students are also liable to exclusion on account of any improper conduct during attendance on lectures.

11. *Gratuitous Aid.*

Four students have received tickets on the recommendation of the Censors of the State Medical Society, in compliance with the provisions of the Legislature endowing this institution.

12. *Statutes and By-Laws of the College.*

The trustees have enacted by-laws for the government of the institution. The regulations contained in the accompanying circular relate to the admission of students.

13. *Description and value of College Buildings.*

For description of college buildings, the Trustees refer to reports of preceding years. Their value is about $30,000.

14. *Description and value of other college property.*

The library contains about 2,212 volumes, most of them new, and all in a good state of preservation. Their value is estimated at $5,900. The chemical apparatus has cost about $2,775. The collection of materia medica is estimated at $317.58.

The museum contains a large collection of specimens of healthy and morbid anatomy, a set of Pathological anatomy, by Dr. THIBERT, and a number of models of healthy anatomy by Dr. AUZOUZ. It contains also specimens of comparative anatomy and zoology, and a large collection of minerals. Its value is about $20,000.

Value of library,	$5,900 00
do chemical apparatus,	2,775 00
do materia medica collection,	317 58
do museum,	20,000 00
Total,	$28,992 58

The Trustees have also on hand a balance of State appropriation, amounting to $4,000, which has been appropriated but not expended.

15. *Revenue.*

The revenue is derived from the sale of tickets, and from matriculation and graduation fees.

From the sale of tickets during the past year, there has been collected, and is still collectable, about	$4,200 00
From graduation fees, have been received	520 00
From matriculation,	455 00
Total,	$5,175 00

16. *Debts.*

None.

17. *Income and expenditures.*

The whole income (in No. 15,) is,	$5,175 00
The whole expenditure for fuel, light and attendance, as near as can be ascertained,	1,031 90
Balance,	4,143 10

The annual appropriation of $1,000, given by the State for the library, museum, &c., is not included in the above statement.

D. D. BARNARD, *Pres. of Board of Trustees.*

GEO. DEXTER, *Secretary.*

10. MEDICAL DEPARTMENT OF THE UNIVERSITY OF BUFFALO.

The Council of the University of Buffalo, in compliance with the requisition of the Regents of the University, submit the following report for the last collegiate year, ending the fourteenth day of June, 1849, containing a just and true statement of facts, showing the progress and condition of the medical department of said University, (this being the only department yet organized,) during and at the close of said year, in respect to the several subject matters following, viz:

1. *Number and description of Professorships.*

The Professorships in the Medical Department of said University, as established by the Council, are the following:

1. Professorship of Physiology and Medical Jurisprudence.
2. do Pathology and Materia Medica.
3. do General and Special Anatomy.
4. do Obstetrics and Diseases of Women and Children.
5. do Principles and Practice of Surgery and Clinical Surgery.
6. do Principles and Practice of Medicine and Clinical Medicine.
7. do Chemistry and Pharmacy.

2. *Faculty and other College officers.*

The Faculty of the Medical Department of said University, including all persons charged with the duty of giving public instruction therein during said year, consisted of individuals holding the aforementioned seven professorships, and the Demonstrator of Anatomy.

The names of the several persons holding offices in the Medical Department of said University, with the offices held by them respectively, and the salaries or annual compensation for official services allowed to each of them, were as follows:

1. Charles Brodhead Coventry, M. D., Professor of Physiology and Medical Jurisprudence, ticket,	$9 00
2. Charles Alfred Lee, M. D., Professor of Pathology and Materia Medica, ticket,	9 00
3. James Webster, M. D., Professor of General and Special Anatomy, ticket,	9 00

4. James P. White, M. D., Professor of Obstetrics and Diseases of Women and Children, ticket,	$9 00
5. Frank H. Hamilton, M. D., Professor of Principles and Practice of Surgery and Clinical Surgery, ticket,	9 00
6. Austin Flint, M. D., Professor of Principles and Practice of Medicine and Clinical Medicine, ticket,	9 00
7. George Hadley, M. D., Professor of Chemistry and Pharmacy, ticket,	11 00
8. Corydon La Ford, M. D., Demonstrator of Anatomy, ticket,	5 00

3. *Number of Students.*

The number of students attending the regular course of instruction during said year, was eighty-two. For the names, residences, &c., of said students, the Council respectfully refer to the accompanying printed catalogue.

The number of graduates at the close of the collegiate year, ending June 14th, was nineteen.

All the students were above the age of fifteen, and the great majority were from eighteen to twenty-one years of age.

No one was admitted to graduation before completing the twenty-first year of his age. The average age of graduates was probably not far from twenty-three years.

4 *Classification of Students.*

There is no classification of students, except that some are first course students, and others had attended one, two or three previous courses. A few were practitioners of medicine and graduates.

5. *College Terms or Sessions.*

The terms or sessions for studies in the Medical Department of said University, during the said year, were the following:

A dissecting term commenced November 1st, 1848, and continued four months.

A lecture term commenced on the 29th of November, 1848, and continued twenty weeks.

6. *Mode of Instruction.*

By lectures, demonstrations, clinical illustrations and recitations in the sciences of medicine and surgery, and collateral sciences.

Public lectures were given in the various branches of medical instruction. The students were not required, but recommended, generally, to take notes. Examinations on the subjects of the previous lecture were usually had before commencing each lecture.

7. *Discipline.*

The Faculty consider themselves at liberty to exercise the power of expulsion for crimes or immoral conduct. No occasion for the exercise of this power occurred during the last year. No discrimination of relative merit, as regards scholarship, or conduct, was made.

8. *Gratuitous aid.*

No provision for gratuitous aid exists in this University.

9. *Statutes and By-laws.*

The Regents are respectfully referred to the accompanying circular for the general regulations of the Medical Dapartment of said University.

10. *Description and value of College Buildings*

The building occupied by the Medical Department of said University during the last year, was a leased building, refitted and adapted to purposes of Medical instruction. The annual rent of the building is $300.

11. *Description and value of other College Property.*

The Library contains about 519 volumes ; estimated value about $800.

The Chemical and Philosophical Apparatus &c., is the property of the Professor of Chemistry and Pharmacy.

The Anatomical and Pathological Museum is valued at about $400. This does not include private property of the several Professors deposited in the College Museum.

During the last Collegiate year, $1,000 have been received from the State. In the whole about $14,000 have been expended in the construction of a College edifice. Of this sum, $10,700 was contributed by the citizens of Buffalo, $2,000 in two annual appropriations from the State, and the remaining thousand by the Faculty. There is still an uncollected balance on the subscription of $1,350 : a small portion of which will be available. A considerable portion, however, of this expenditure has been made since the close of the collegiate year.

12. *Revenue.*

1. Graduation fees,	$360 00
2. Matriculation fees,	231 00
	$591 00

The above is exclusive of the amounts received by the Professors for their tickets.

13. *Debts.*

There is due on the lot on which the building is erected, secured by mortgage, $3,300. The only debt besides this, is $550, advanced by the chairman of the building committee, towards the completion of the edifice.

14. *Income and expenditures.*

The income derived from the matriculation and graduation fees, was expended in the payment of the rent of the college building and various incidental expenses, as fuel, lights, &c. The amount received from the State, ($1,000) was expended in the construction of the new college building.

15. *Price of Tuition.*

The amount required of the pupil for the tickets of all the Professors, was	$65 00
He was required to pay a matriculation fee of	3 00
Graduates were required to pay a fee of	20 00
The dissecting ticket was	5 00
Aggregate,	$93 00

16. *Remarks.*

The Medical and Surgical Dispensary, previously established, was continued during the session of 1849. Patients were prescribed for before the class, and surgical operations performed ; medicines being furnished to those unable to pay for such services and medicines.

The Buffalo Hospital of the Sisters of Charity is situated a few rods from the college building. This institution is capable of receiving about one hundred patients and additions are nearly completed which will double its ability to afford relief to the indigent sick. The Professors of Medicine and Surgery are the attending medical officers of the Hospital, from the month of October to the month of April of each year. The college students are permitted to visit the Hospital twice weekly, with the attending medical officers, on payment of a fee of five dollars for the benefit of the Hospital. By this arrangement, ample clinical advantages are offered to students attending lectures in the medical department of the University. About sixty students attended the Hospital during the lecture session of 1849 '50.

The foregoing is respectfully submitted by the undersigned, (in behalf of the Council of the University of Buffalo,) being a committee appointed expressly for that purpose.

T. BURWELL,
JAMES P. WHITE,
Committee.

G. B. Rich, *Treasurer.*

11. TABULAR STATEMENT

Showing the relative condition of the several Literary Colleges, subject to the visitation of Regents, taken from the preceding reports.

	Columbia College.	Union College.	Hamilton College.	Geneva College.	University of the city of New-York.	Madison University.	St. John's College, Fordham.
Number of professors and tutors, ...	13	14	10	6*	11*	8	16
Whole No. of students, (not including medical,).	136	294	166	43	135	111	63
Value of college buildings and grounds, ...	not stated	296,485	last report	last report	260,000	last report	98,250
Value of library, ...	not stated	34,817	last report	not stated	7,000	last report	25,000
Value of apparatus, ...	not stated		last report	not stated	10,000	last report	
Total value of grounds, buildings, library and apparatus, ...	....	$331,302	....	....	277,000	....	123,250
Other college property, ...	not stated	272,872	71,524	3,013	....	....	None.
Value of the whole, ...	....	$603,174	....	....	277,000	....	123,250
Debts,.	$62,904	28,675	7,000	6,473	81,121	None.	35,000
Annual revenue.							
Tuition and room rent, ...	9,585	7,662	4,712	881	3,393	2,948	....
Income or interest of permanent fund, ...	10,009	13,734	5,202	209	3,726	483	....

Income from other sources,	14,109	1,100	11	845	3,925	1,693	
Appropriated by the Legislature,	....	....	3,000	3,505	1,500	3,000	2,500
Appropriated to grammar school,	529	....	....	....	....	....	
	$34,232	22,496	12,925	5,440	12,544	8,124	
Annual expenditure.							
Salaries of professors and teachers,	13,066	12,659	8,768	3,001	11,760	7,690	
Interest on debts, loans, repaid,	18,031	1,896	96	583	5,244	....	
Repairs, &c.,	903	3,435	....	....	....	....	
Incidental expenses,	2,268	....	4,003	1,053	1,380	434	
Charity students,	....	3,804	....	....	....	....	
Library and apparatus,	....	279	125	....	....	....	
Sundries,	405	296	....	713	....	....	
	$34,673	22,369	12,992	5,350	18,384	8,124	

• Not incluing Medical Professors.

12. TABULAR STATEMENT

Showing the relative condition of the several Medical Colleges and Medical Departments of Literary Colleges, subject to the visitation of the Regents, taken from the preceding reports.

	College of Physicians & Surgeons, New-York.	Medical Institut'n of Geneva Col'ge.	Albany Medical College.	Medical Department University, city of New-York.	Medical Department University of Buffalo.
Number of professors,	7	6	8	6	7
Number of students, term 1849, or 1849–'50	208	58	96	404	82
Value of college buildings and grounds,	30,000	16,049	30,000	60,000	ex'd 14,000
Value of library,	1,500	1,300	5,900	....	800
Value of apparatus and museum,	3,500	4,008	23,092	....	400
Total value of above,	35,000	21,357	58,992	....	15,200
Other college property,	none	4,313	4,000	....	not stated
Value of whole,	$35,000	$25,670	62,992	....	....
Debts,	$17,500	$400	none	$47,000	$3,850
Annual revenue,					
Grant from the State,	500	1,000	1,000	1,000	1,000
Matriculation fees,	965	89	455	....	231
Graduation fees,	1,125	190	520	....	360
Rents,	343	13	....	....	....

Income from other sources, ...	347	500	....	....	....
	$3,280	$1,792	$1,975	....	$1,591
Annual expenditure.					
Library and museum, &c., ...	35	92	1,000	....	....
Interest, ...	1,225	....	....	1,000	....
Repairs, ...	331	90	....	....	....
Incidental expenses, ...	827	655	1,038	....	591
Payment of debts, ...	....	831	....	....	*1,000
	$2,418	$1,668	$2,038	....	$1,591

* Expended on new college building.

NUMBER OF GRADUATES.

College of Physicians and Surgeons, New-York, session of 1848, '49, ...	45
Medical Institution of Geneva, session ending June, 1849, ...	13
Albany Medical College, session of 1849, '50, ...	24
University of the city of New-York, session of 1848, '49, ...	142
Medical Department of the University of Buffalo, session of 1849, ...	19
	243

(B.)—ACADEMIES.

SCHEDULE No. 1.

Being a catalogue of the Academies reporting in 1850, *with the towns or incorporated villages, and counties in which they are situated, and the names of the Principal of each.*

	ACADEMIES.	TOWN.	COUNTY.	NAME OF PRINCIPAL.
1.	Academy at Little Falls,	Little Falls,	Herkimer,	James H. Magoffin, A. M.
2.	Addison Academy,	Addison,	Steuben,	Asa W. Smith, A. B.
3.	Albany Academy,	Albany,	Albany,	Rev. Wm. H. Campbell, D. D.
4.	Albany Female Academy,	Albany,	Albany,	L. Sprague Parsons, A. M.
5.	Albany Female Seminary,	Albany,	Albany,	Emerson F. Carter.
6.	Albion Academy,	Albion,	Orleans,	Perez Brown, A. M.
7.	Alfred Academy,	Alfred,	Allegany,	William C. Kenyon, A. B., and Ira Sayles, A. B.
8.	Amenia Academy,	Amenia,	Dutchess,	Gilbert Haven, A. M.
9.	Ames Academy,	Ames,	Montgomery,	Rev. Philips Payson.
10.	Amsterdam Female Seminary,	Amsterdam,	Montgomery,	Richard P. Cavert, A. M.
11.	Argyle Academy,	Argyle,	Washington,	Joseph McCracken.
12.	Auburn Academy,	Auburn,	Cayuga,	W. Hopkins, A. B.
13.	Auburn Female Seminary,	Auburn,	Cayuga,	J. W. Walcott, A. B.
14.	Augusta Academy,	Augusta,	Oneida,	Annie M. Sykes,
15.	Aurora Academy,	Aurora,	Erie,	C. Littlefield, A. B.
16.	Ball Seminary,	Hoosick Falls,	Rensselaer,	John Bascom, A. B.
17.	Bethany Academy,	Bethany,	Genesee,	(None.)

18.	Binghamton Academy,	Binghamton,	Broome,	Alonzo Phelps, A. M.
19.	Brockport Collegiate Institute,	Brockport,	Monroe,	J. G. K. Truair, A. M.
20.	Brookfield Academy,	Brookfield,	Madison,	Riley Taylor,
21.	Brooklyn Female Academy,	Brooklyn,	Kings,	Alonzo Cruttenden, A. M.
22.	Cambridge Washington Academy,	Cambridge,	Washington,	Rev. And'w M. Beveridge, A. B.
23.	Canandaigua Academy,	Canandaigua,	Ontario,	Marcius Willson, A. M.
24.	Canajoharie Academy,	Canajoharie,	Montgomery,	T. Bibb Bradley.
25.	Canton Academy,	Canton,	St Lawrence,	Abel Wood, A. B.
26.	Cary Collegiate Seminary,	Caryville	Genesee,	Rev. Bela Fancher.
27.	Cayuga Academy,	Aurora,	Cayuga,	Isaac Gray.
28.	Champlain Academy,	Champlain,	Clinton,	Daniel D. Gorham, A. B.
29.	Cherry Valley Academy,	Cherry Valley,	Otsego,	Charles G. Hazeltine, A. B.
30.	Chester Academy,	Chester,	Orange,	Rev. Phineas Robinson, A. B.
31.	Claverack Academy,	Claverack,	Columbia,	Isaac Wostendyke, A. B.
32.	Clinton Academy,	Easthampton,	Suffolk,	Thomas Jefferson King, A. B.
33.	Clinton Grammar School,	Clinton,	Oneida,	Rev. H. H. Kellogg, A. B.
34.	Clinton Liberal Institute,	Clinton,	Oneida,	Rev. Thomas J. Sawyer, A. M.
35.	Clover Street Seminary,	Brighton,	Monroe,	Mrs. Celestia A. Brewster.
36.	Cortland Academy,	Homer,	Cortland,	Samuel B. Woolworth, A. M.
37.	Cortlandville Academy,	Cortlandville,	Cortland,	Lemuel S. Pomeroy, A. B.
38.	Coxsackie Academy.	Coxsackie,	Greene,	Avery J. Smith, A. B.
39.	Deaf and Dumb Institution,	New-York,	New-York,	Harvey P. Peet, LL. D.
40.	Delaware Academy,	Delhi,	Delaware,	Merrit G. McKoon, A. M.
41.	Delaware Literary Institute,	Franklin,	Delaware,	Rev. George Kerr, A. B.
42.	De Ruyter Institute,	De Ruyter,	Madison,	James R. Irish, A. M.
43.	Dutchess County Academy,	Poughkeepsie,	Dutchess,	Rev. Peter S. Burchan.
44.	East Bloomfield Academy,	East Bloomfield,	Ontario,	Stephen W. Clark, A. M.
45.	Elmira Academy,	Elmira,	Chemung,	E. N. Barbour.

SCHEDULE No. 1.—(CONTINUED.)

	ACADEMIES.	TOWN.	COUNTY.	NAME OF PRINCIPAL.
46.	Erasmus Hall Academy,	Flatbush,	Kings,	Rev. Rich'd Van Kleeck, A. M.
47.	Fairfield Academy,	Fairfield,	Herkimer,	Rev. A. Briggs, A. B.
48.	Falley Seminary,*	Fulton,	Oswego,	Edmund E. E. Bragdon, A. M.
49.	Farmer's Hall Academy,	Goshen,	Orange,	David L. Fowle, A. M.
50.	Fayetteville Academy,	Fayetteville,	Onondaga,	Orlo E. Sharp.
51.	Fort Covington Academy,	Fort Covington,	Franklin,	Rev. Luther Humphrey.
52.	Franklin Academy,	Malone,	Franklin,	George H. Wood, A. B.
53.	Franklin Academy,	Prattsburgh,	Steuben,	Seth B. Cole, A. M.
54.	Fredonia Academy,	Fredonia,	Chautauque,	Charles A. Seely, A. B.
55.	Friendship Academy,	Friendship,	Allegany,	Jeremiah Hatch, A. B.
56.	Galway Academy,	Galway,	Saratoga,	Paoli Durkee, A. B.
57.	Genesee Wesleyan Seminary,	Lima,	Livingston,	James L. Alverson, A. M.
58.	Genesee and Wyoming Seminary,	Alexander,	Genesee,	Norman F. Wright, A. B.
59.	Geneseo Academy,	Geneseo,	Livingston,	Rev. James H. Baird, A. B.
60.	Genoa Academy,	Genoa,	Cayuga,	Marvin M. Baldwin, A. B.
61.	Gilbertsville Academy and Coll. Inst.	Gilbertsville,	Otsego,	Edward H. Johnston.
62.	Glen's Falls Academy,	Glens Falls,	Warren,	William McLaren.
63.	Gouverneur Wesleyan Seminary,	Gouverneur,	St. Lawrence,	Rev. John W. Armstrong.
64.	Grammar School of Columbia Coll.,	New-York,	New-York,	Charles Anthon, LL. D.
65.	Grammar School, University City of New-York,	New-York,	New-York,	E. A. Johnson.
66.	Granville Academy,	North Granville,	Washington,	Eli T. Mack, A. B.
67.	Greenbush and Schodack Academy,	Greenbush,	Rensselaer,	Rev. William Waterbury.

68.	Greenville Academy,	Greenville,	Greene,	Lorenzo Hand.
69.	Groton Academy,	Groton,	Tompkins,	James E. Dexter.
70.	Hamilton Academy,	Hamilton,	Madison,	Munroe Weed, A. M.
71.	Hartwick Seminary,	Hartwick,	Otsego,	George B. Miller, D. D.
72.	Hobart Hall Institute,	Holland Patent,	Oneida,	Edward C. Seymour.
73.	Hubbardsville Academy,	Hubbard's Corners,	Oneida,	Philander L. Woods, A. B.
74.	Hudson Academy,	Hudson,	Columbia,	Jonathan Ford, A. B.
75.	Ithaca Academy,	Ithaca,	Tompkins,	S. D. Carr, A. B.
76.	Jamestown Academy,	Jamestown,	Chautauque,	Edward A. Dickenson, A. B.
77.	Jefferson Academy,	Jefferson,	Schoharie,	Joseph Hale.
78.	Jefferson County Institute,	Watertown,	Jefferson,	D. M. Linsley.
79.	Johnstown Academy,	Johnstown,	Fulton,	William Lloyd, A. B.
80.	Jordan Academy,	Jordan,	Onondaga,	Hugh B. Jolly, A. M.
81.	Keeseville Academy,	Keeseville,	Clinton,	I. N. Gregory, A. B.
82.	Kinderhook Academy,	Kinderhook,	Columbia,	Alexander Watson, A. M.
83.	Kingsboro' Academy,	Kingsboro',	Fulton,	Horace Sprague, A. M.
84.	Kingston Academy,	Kingston,	Ulster,	William McGeorge, A. M.
85.	Lansingburgh Academy,	Lansingburgh,	Rensselaer,	Rev. Cyrus Bolster, A. B.
86.	Le Roy Female Seminary,	Le Roy,	Genesee,	Miss E. E. Ingham Stanton.
87.	Liberty Normal Institute,	Liberty,	Sullivan,	John F. Stoddard.
88.	Lowville Academy,	Lowville,	Lewis,	David P. Mayhew, A. B.
89.	Macedon Academy,	Macedon Centre,	Wayne,	Henry Wheeler, A. M.
90.	Manlius Academy,	Manlius,	Onondaga,	Joseph R. Dixon, A. B.
91.	Mayville Academy,	Mayville,	Chautauque,	Caleb B. Crumb, A. B.
92.	Mexico Academy,	Mexico,	Oswego,	Abner Davison, A. M.
93.	Middlebury Academy,	Middlebury,	Wyoming,	David Burbank.
94.	Millville Academy,	Millville,	Orleans,	Rev. S. P. Barker.

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* "Falley Seminary of the Black River Conference." Formerly Fulton Academy. The name was changed by chap. 349 of the Laws of 1849.

SCHEDULE No. 1.—(Continued.)

	ACADEMIES.	TOWN.	COUNTY.	NAME OF PRINCIPAL.
95.	Monroe Academy,	Henrietta,	Monroe,	E. R Keyes, A. B.
96.	Montgomery Academy,	Montgomery,	Orange,	S. S. Harrison, A. B.
97.	Moravia Institute,	Moravia,	Cayuga,	Watts C. Livingston, A. B.
98.	Mount Pleasant Academy,	Sing-Sing,	Westchester,	C. F. Maurice, A. B.
99.	Munro Academy,	Elbridge,	Onondaga,	John H. Wilson, A. M.
100.	New Berlin Academy,	New-Berlin,	Chenango,	Moses E. Dunham, A. B.
101.	Newburgh Academy,	Newburgh,	Orange,	Rev. Baynard R. Hall, D. D.
102.	New Paltz Academy,	New-Paltz,	Ulster,	Rev. Calvin Butler, A. B.
103.	New-York Free Academy,	New- York,	New-York,	Horace Webster, LL. D.
104.	North Salem Academy,	North Salem,	Westchester,	John F. Jenkins, A. M.
105.	Norwich Academy,	Norwich,	Chenango,	Rollo O. Paige, A. B.
106.	Nunda Literary Institute,	Nunda,	Livingston,	Horatio G. Winslow, A. B.
107.	Ogdensburgh Academy,	Ogdensburgh,	St. Lawrence,	Roswell G. Pettibone, A. B.
108.	Oneida Conference Seminary,	Cazenovia,	Madison,	Rev. Henry Bannister.
109.	Onondaga Academy,	Onondaga Valley,	Onondaga,	James M. Burt, A. B.
110.	Ontario Female Seminary,	Canandaigua,	Ontario,	E. G. Tyler, B. A.
111.	Ovid Academy,	Ovid,	Seneca,	George W. Franklin.
112.	Owego Academy,	Owego,	Tioga,	William Smyth, A. M.
113.	Oxford Academy,	Oxford,	Chenango,	John Abbot, A. B.
114.	Peekskill Academy,	Peekskill,	Westchester,	Albert Wells, A. B.
115.	Phipps Union Seminary,	Albion,	Orleans,	Mrs. Caroline P. Achilles.
116.	Plattsburgh Academy,	Plattsburgh,	Clinton,	John S. D. Taylor, A. M.
117.	Pompey Academy,	Pompey,	Onondaga,	Truman K. Wright, A. B.
118.	Poughkeepsie Female Academy,	Poughkeepsie,	Dutchess,	Jacob C Tooker, A. M.

119.	Prattsville Academy,	Prattsville,	Greene,	H. Gallup, A. B.
120.	Red Creek Union Academy,	Red Creek,	Wayne,	Rev. Eli C. Bruce, A. B.
121.	Rensselaer Institute,	Troy,	Rensselaer,	B. Franklin Greene.
122.	Rensselaerville Academy,	Rensselaerville,	Albany,	Julius R. Pomeroy, A. B.
123.	Rhinebeck Academy,	Rhinebeck,	Dutchess,	William R. Harper, A. M.
124.	Riga Academy,	Riga,	Monroe,	R. D. H. Allen, A. B.
125.	Rochester Collegiate Institute,	Rochester,	Monroe,	N. W. Benedict, A. M.
126.	Rochester Female Academy,	Rochester,	Monroe,	Miss Araminta D. Doolittle.
127.	Rome Academy,	Rome,	Oneida,	Rev. S. R. Brown, A. B.
128.	Rutgers Female Institute,	New-York,	New-York,	Charles E. West, A. M.
129.	Sag Harbor Institute,	Sag Harbor,	Suffolk,	George W. Goodale, A. B.
130.	St. Lawrence Academy,	Potsdam,	St. Lawrence,	William F. Bascom, A. M.
131.	Sand Lake Academy,	Sand Lake,	Rensselaer,	William H. Scram, A. B.
132.	Sauquoit Academy,	Sauquoit,	Oneida,	G. W. Davenport, A. B.
133.	Schenectady Lyceum and Acad'y,	Schenectady,	Schenectady,	William T. Akin, A. B.
134.	Schoharie Academy,	Schoharie,	Schoharie,	George W. Briggs.
135.	Schuylerville Academy,	Schuylerville,	Saratoga,	William T. Goodnough, A. B.
136.	Seneca Falls Academy,	Seneca Falls,	Seneca,	Orin Root, A. M.
137.	Seward Female Seminary,	Rochester,	Monroe,	Lucilia Tracy.
138.	Sherburne Union Academy,	Sherburne,	Chenango,	J. Fayette Pettibone, A. B.
139.	Spencertown Academy,	Spencertown,	Columbia,	Elias E. Warner, A. B.
140.	Springville Academy,	Springville,	Erie,	Jonathan W. Earle, A. B.
141.	S. S. Seward Institute,	Florida,	Orange,	Miss Elizabeth Parsons.
142.	Starkey Seminary,	Starkey,	Yates,	Rev. Edmund Chadwick.
143.	Stillwater Seminary,	Stillwater,	Saratoga,	Nathan W. Ayer, A. B.
144.	Troy Academy,	Troy,	Rensselaer,	A. P. Beals, A. B.
145.	Troy Female Seminary,	Troy,	Rensselaer,	Mrs. Sarah L. Willard.
146.	Union Hall Academy,	Jamaica,	Queens,	Henry Onderdonk, Jr., A. M.

SCHEDULE NO. 1—(CONTINUED.)

	ACADEMIES.	TOWN.	COUNTY.	NAME OF PRINCIPAL.
147.	Union Literary Society, ...	Bellville,...........	Jefferson, ...	Richard Ellis, A. B.
148.	Union Village Academy,........	Union Village,......	Washington, ...	James S. Livingston, A. B.
149.	Utica Academy,...............	Utica,.............	Oneida,........	George Spencer, A. B.
150.	Utica Female Academy, ...	Utica,.............	Oneida,........	Miss Jane E. Kelly.
151.	Vernon Academy,..............	Vernon, ...	Oneida,........	Eli C. Botsford, A. B.
152.	Wallkill Academy,............	Wallkill, ...	Orange, ...	Patrick McGregor, A. M.
153.	Walworth Academy, ...	Walworth, ...	Wayne, ...	James A. Smith.
154.	Washington Academy,..........	Salem, ...	Washington, ...	James S. Dobbin, A. B.
155.	Westfield Academy,............	Westfield, ...	Chautauque,....	J. E Pilsbury, A. B.
156.	Whitehall Academy,............	Whitehall, ...	Washington, ...	E. M. Maynard.
157.	Whitesboro Academy,..........	Whitesboro,........	Oneida,........	James Smith, A. B.
158.	Whitestown Seminary,..........	Whitestown, ...	Oneida,........	Samuel Farnham, A. B.
159.	Wilson Collegiate Institute,......	Wilson, ...	Niagara, ...	Benjamin Wilson, A. M.
160.	Windsor Academy,.............	Windsor, ...	Broome, ...	Rev. A. Craig, A. M.
161.	Yates Academy,...............	Yates,.............	Orleans,.......	Rev. William B. Bunnell, A.M.

In many cases, I presume that the Academic Degree is actually "A. M." instead of "A. B.," as entered, but I must follow the report, which usually states that the Principal is the graduate of a College.

Of the above, No. 17. Bethany Academy, reports only its financial condition.

Aurora Academy, Willink Post Office.
Hartwick Seminary, Hartwick Seminary Post Office.
North Salem Academy, Salem Centre Post Office.
Greenbush and Schodack Academy, East Greenbush Post Office.

N. B. I have inserted the names of Post Offices most convenient, and shall be happy to receive any additional information.

T. B. BECK.

SCHEDULE No. 2.

Containing abstracts of the Academic Reports for 1849, *exhibiting the number of Students taught in the several Academies from which such reports have been received, and the sex of those who are claimed to have pursued Classical Studies, or the higher branches of English Education, or both, with the apportionment of their distributive shares of* $40,000 *out of the income of the Literature Fund for said year.*

Names of Academies incorporated by the Regents. or subject to their visitation.	Whole No. of students during the quarter or term ending at date of report.	Whole No. of students during the year ending at the date of the report.	No. of students claimed by the trustees to have pursued classical studies, or the higher branches of English educat'n, or both for 4 months of said year.	Sex of students so claimed.		No. of students allowed by the Regents to have pursued said studies for four months of said year.	Average age of students so allowed.	Amount of money apportioned from the income of the Literature Fund.
				Males.	Females.			
Academy at Little Falls,	63	223	129	59	70	129	15½	$312 46
Addison Academy,	114	191	63	24	39	63	15½	152 61
Albany Academy,	198	309	188	188	......	188	14	455 37
Albany Female Academy,	213	435	312	......	312	312	14½	755 68
Albany Female Seminary,	71	120	63	......	63	63	n. ad	152 61
Albion Academy,	90	257	150	119	31	150	14½	363 33
Alfred Academy,	191	353	256	151	105	256	19	620 05
Amenia Seminary,	127	274	206	125	81	206	17	498 94
Ames Academy,	20	77	59	22	37	55	13½	133 23
Amsterdam Female Seminary,	72	149	66	30	36	66	15½	159 87
Argyle Academy,	71	114	83	45	38	83	16½	201 05

SCHEDULE No. 2.—(CONTINUED.)

Names of Academies incorporated by the Regents, or subject to their visitation.	Whole No. of students during the quarter or term ending at date of report.	Whole No. of students during the year ending at the date of the report.	No. of students claimed by the trustees to have pursued classical studies, or the higher branches of English educat'n, or both for 4 months of said year.	Sex of Students so claimed.		No. of students allowed by the Regents to have pursued said studies for four months of said year.	Average age of students so allowed.	Amount of money apportioned from the income of the Literature Fund.
				Males.	Females.			
Auburn Academy,	120	217	140	136	4	140	16½	339 10
Auburn Female Seminary,	103	220	154	......	154	154	15½	373 02
Augusta Academy,	28	78	35	17	18	35	15	84 78
Aurora Academy,	65	140	62	37	25	62	16½	150 18
Ball Seminary,	50	104	25	14	11	25	16	60 56
Binghamton Academy,	115	181	159	122	37	159	14½	385 13
Brockport Collegiate Institute,	106	245	187	81	106	187	16	452 94
Brookfield Academy,	62	141	92	45	47	92	16½	222 84
Brooklyn Female Academy,	444	688	322	......	322	317	14½	767 79
Cambridge Washington Academy,	128	243	140	62	78	140	16	339 10
Canandaigua Academy,	73	162	83	83	......	83	17	201 05
Canajoharie Academy,	24	66	55	30	25	55	16	133 23
Canton Academy,	44	109	55	14	41	55	15½	133 23
Cary Collegiate Seminary,	78	210	74	42	32	73	17	176 83
Cayuga Academy,	108	170	117	72	45	117	16½	283 39
Champlain Academy,	52	177	42	22	20	42	16	101 74

Cherry Valley Academy,	52	135	92	44	48	92	16½	222	83
Chester Academy,	55	97	35	19	16	35	16	84	78
Claverack Academy,	26	63	14	10	4	14	14	33	94
Clinton Academy,	27	51	15	8	7	15	15	36	34
Clinton Grammar School,	61	146	98	35	63	98	16½	237	38
Clinton Liberal Institute,	95	208	153	89	64	153	17½	370	60
Clover-street Seminary,	91	171	79	20	59	79	nt.ad	191	36
Cortland Academy,	212	480	238	123	115	238	17½	576	44
Cortlandville Academy,	125	252	103	44	59	103	16½	249	49
Coxsackie Academy,	31	84	24	14	10	24	14½	58	14
Deaf and Dumb Institution, New-York,	222	264	222	127	95	222	....	537	69
Delaware Academy,	94	187	87	45	42	87	16	210	73
Delaware Literary Institute,	177	306	274	158	116	274	18	663	65
De Ruyter Institute,	85	233	115	59	56	115	17½	278	55
Dutchess County Academy,	38	67	60	60	......	59	nt.ad	142	92
East Bloomfield Academy,	38	136	77	40	37	77	17½	186	52
Elmira Academy,	240	355	207	107	100	207	14½	501	36
Erasmus Hall Academy,	78	115	53	34	19	53	14	128	39
Fairfield Academy,	148	256	207	109	98	207	17½	501	36
Falley Seminary,	160	321	155	81	74	155	16	375	44
Farmer's Hall Academy,	134	218	143	77	66	143	14½	346	38
Fayetteville Academy,	15	70	46	22	24	46	15½	111	42
Fort Covington Academy,	64	113	20	12	8	20	17	48	45
Franklin Academy, (Malone)	75	169	123	63	60	123	16	297	93
Franklin Academy, (Prattsburgh)	105	225	151	80	71	151	17	365	75
Fredonia Academy,	165	304	182	85	97	181	nt.ad	438	41
Friendship Academy,	66	170	29	13	16	29	15½	70	25

SCHEDULE NO. 2.—(CONTINUED.)

Names of Academies incorporated by the Regents, or subject to their visitation.	Whole No. of students during the quarter or term ending at date of report.	Whole No. of students during the year ending at the date of the report.	No. of students claimed by the trustees to have pursued classical studies, or the higher branches of English educat'n, or both for 4 months of said year.	Sex of students so claimed.		No. of students allowed by the Regents to have pursued said studies for four months of said year.	Average age of students so allowed.	Amount of money apportioned from the income of the Literature Fund.
				Males.	Females.			
Galway Academy,	33	33	24	18	6	24	17	58 14
Genesee Wesleyan Seminary,	358	583	396	237	159	396	18	959 14
Genesee & Wyoming Seminary,	100	230	131	62	69	130	16½	314 88
Geneseo Academy,	72	171	88	43	45	88	15½	213 16
Genoa Academy,	37	128	91	59	32	91	16½	220 42
Gilbertsville Academy, and C. I.,	55	112	98	47	51	98	nt.ad	237 38
Glen's Falls Academy,	126	216	155	81	74	155	15	375 44
Gouverneur Wesleyan Seminary,	125	294	187	93	94	187	16	452 95
Grammar School of Columbia College,	228	351	197	197	......	197	13½	477 18
Grammar School Univ. C. of New-York,	134	197	108	108	......	108	13½	261 60
Granville Academy,	30	96	51	29	22	51	16	123 53
Greenbush & Schodack Academy,	28	60	19	13	6	19	15½	46 03
Greenville Academy,	30	88	20	12	8	20	15	48 45
Groton Academy,	26	170	97	48	49	97	15½	234 96
Hamilton Academy,	136	308	117	56	61	117	17	283 39
Hartwick Seminary,	23	70	44	44	......	44	18½	106 58

Hobart Hall Institute,	81	135	102	55	47	102	16½	247 06
Hubbardsville Academy,	49	49	14	7	7	14	17½	33 94
Hudson Academy,	58	152	100	71	29	98	15	237 38
Ithaca Academy,	170	332	200	106	94	200	16½	484 41
Jamestown Academy,	78	168	113	53	60	113	18	273 71
Jefferson Academy,	20	70	14	10	4	none	17	
Jefferson County Institute,	172	307	110	57	53	110	19	266 44
Johnstown Academy,	28	84	47	19	28	47	15	113 84
Jordan Academy,	75	180	115	62	53	115	14	278 55
Keeseville Academy,	112	194	59	26	33	59	16	142 92
Kinderhook Academy,	90	180	108	61	47	108	14½	261 60
Kingsboro' Academy,	55	124	50	27	23	50	17½	121 11
Kingston Academy,	216	314	202	130	72	201	13	486 82
Lansingburgh Academy,	74	142	59	29	30	59	14	142 92
Le Roy Female Seminary,	145	250	207	......	207	207	16	501 36
Liberty Normal Institute,	55	115	54	28	26	54	16½	130 81
Lowville Academy,	45	169	76	42	34	76	17½	184 09
Macedon Academy,	47	165	104	62	42	102	17	247 06
Manlius Academy,	22	72	52	28	24	52	16	125 95
Mayville Academy,	47	101	56	27	29	56	17½	135 65
Mexico Academy,	94	178	150	83	67	150	15½	363 33
Middlebury Academy,	122	209	102	50	52	102	17	247 06
Millville Academy,	..	150	81	52	29	81	16	196 20
Monroe Academy,	56	113	36	20	16	36	16	87 20
Montgomery Academy,	61	130	93	55	38	93	16	225 26
Moravia Institute,	71	89	36	22	14	36	15	87 20
Mount Pleasant Academy,	44	53	42	42	......	42	14	101 73
Munro Academy,	85	251	134	66	68	134	15½	324 57

SCHEDULE NO. 2.—(CONTINUED.)

Names of Academies incorporated by the Regents, or subject to their visitation.	Whole No. of students during the quarter or term ending at date of report.	Whole No. of students during the year ending at the date of the report.	No. of students claimed by the trustees to have pursued classical studies, or the higher branches of English educat'n, or both for 4 months of said year.	Sex of students so claimed.		No. of students allowed by the Regents to have pursued said studies for four months of said year.	Average age of students so allowed.	Amount of money apportioned from the income of the Literature Fund.
				Males.	Females.			
New Berlin Academy,	84	180	104	56	48	104	16½	251 91
Newburgh Academy,	60	103	63	45	18	63	15	152 61
New Paltz Academy,	65	85	50	24	26	50	15½	121 11
New-York Free Academy,	......	......	194	194	......	194	nt.ad	469 90
North Salem Academy,	46	119	84	59	25	84	15½	203 47
Norwich Academy,	90	224	104	57	47	104	16	251 91
Nunda Literary Institute,	125	189	68	31	37	68	16½	164 72
Ogdensburgh Academy,	135	173	45	14	31	45	15	109 00
Oneida Conference Seminary,	167	355	262	147	115	262	17½	634 58
Onondaga Academy,	74	248	96	58	38	96	nt.ad	232 54
Ontario Female Seminary,	124	208	185	......	185	185	15	448 10
Ovid Academy,	41	98	54	27	27	54	16	130 81
Owego Academy,	161	228	69	40	29	69	15½	167 14
Oxford Academy,	94	223	143	82	61	143	16½	346 36

Peekskill Academy,	68	100	47	45	2	46	14	111	42
Phipps Union Seminary,	152	254	186	......	186	186	13	450	52
Plattsburgh Academy,	179	290	151	67	84	151	15½	365	75
Pompey Academy,	61	91	52	25	27	52	17	125	95
Poughkeepsie Female Academy,	82	121	86	......	86	86	15	208	31
Prattsville Academy,	54	58	12	9	3	12	13	29	10
Red Creek Union Academy,	90	254	120	60	60	120	15	290	66
Rensselaer Institute,	26	44	40	40	......	40	18	96	89
Rensselaerville Academy,	53	97	38	29	9	38	16	92	05
Rhinebeck Academy,	59	121	85	48	37	85	14½	205	89
Riga Academy,	100	185	91	37	54	91	15	220	42
Rochester Collegiate Institute,	162	292	119	89	30	119	16	288	24
Rochester Female Academy,	93	139	43	......	43	43	15½	104	16
Rome Academy,	142	311	103	48	55	103	17	249	49
Rutgers Female Institute,	453	663	270	......	270	270	15	653	96
Sag Harbour Institute,	56	72	11	2	9	11	15	26	67
St. Lawrence Academy,	111	175	120	76	44	120	17½	290	66
Sand Lake Academy,	48	94	48	38	10	47	nt.ad	113	85
Saquoit Academy,	30	115	57	28	29	57	16	138	08
Schenectady Lyceum and Academy,	199	349	214	64	150	214	14	518	32
Schoharie Academy,	134	226	170	104	66	170	16	411	77
Schuylerville Academy,	78	150	104	57	47	104	15½	251	91
Seneca Falls Academy,	62	139	85	40	45	85	15½	205	89
Seward Female Seminary,	53	123	79	......	79	79	16½	191	36
Sherburne Union Academy,	70	114	62	32	30	62	14	150	19
Spencertown Academy,	33	81	13	11	2	13	nt.ad	31	52
Springville Academy,	72	230	91	41	50	91	17	220	42
S. S. Seward Institute,	38	86	50	17	33	50	14½	121	11

SCHEDULE No. 2.—(Continued.)

Names of Academies incorporated by the Regents, or subject to their visitation.	Whole No. of students during the quarter or term ending at date of report.	Whole No. of students, during the year ending at the date of the report.	No. of students claimed by the trustees to have pursued classical studies, or the higher branches of English educat'n, or both for 4 months of said year.	Sex of students so claimed.		No. of students allowed by the Regents to have pursued said studies for four months of said year.	Average age of students so allowed.	Amount of money apportioned from the income of the Literature Fund.
				Males.	Females.			
Starkey Seminary,	106	180	57	23	34	57	18½	138 08
Stillwater Seminary,	31	72	56	30	26	56	15½	135 65
Troy Academy,	55	118	77	77	......	77	13½	186 52
Troy Female Seminary,	245	413	223	......	223	223	17	540 11
Union Hall Academy,	165	251	147	74	73	147	14	356 07
Union Literary Society,	43	97	85	48	37	85	19	205 89
Union Village Academy,	74	129	76	36	40	75	15½	181 67
Utica Academy,	35	64	40	40	......	40	14	96 89
Utica Female Academy,	146	259	160	......	160	160	15½	387 55
Vernon Academy,	35	95	57	30	27	57	15	138 08
Wallkill Academy,	63	136	72	42	30	72	14¼	174 41
Walworth Academy,	52	100	52	25	27	52	17	125 95
Washington Academy,	35	75	24	10	14	24	15½	58 14
Westfield Academy,	156	216	130	65	65	130	17	314 88
Whitehall Academy,	69	143	70	36	34	70	14½	169 56

Whitesboro' Academy,	49	not st'd	17	13	4	13	nt.ad	31 32
Whitestown Seminary,	130	277	195	111	84	195	19	472 30
Wilsa Collegiate Institute,	63	183	132	69	63	132	17½	319 72
Windsor Academy,	44	112	35	15	20	35	nt.ad	84 78
Yates Academy,	74	182	122	65	57	122	18	295 50
Total,	14,925	28,941	16,553	8,206	8,348	16,514		$40,000 00

Millville Academy,.... 75

SCHEDULE No. 3.

Containing Abstracts from the Academic Reports for 1849, *exhibiting a statement of the permanent endowments and other property belonging to the several Academies from which reports were received, with the amount of debts due from them respectively.*

NAMES OF ACADEMIES.	PERMANENT ENDOWMENTS.			Total value of lot, buildings, library, and apparatus.	Other academic property.	Total value of the whole.	Debts due by academy
	Value of academy lot and buildings.	Value of library.	Value of apparatus.				
Academy at Little Falls, ...	$12,000	$329	467	12,796	$85	$12,881	$1,133
Addison Academy,..................	3,300	158	150	3,608	none.	3,608	none.
Albany Academy,...................	90,000	1,645	1,947	93,592	5,500	99,092	14
Albany Female Academy, ...	33,347	958	1,966	36,271	2,500	38,771	none.
Albany Female Seminary,............	7,000	900	914	8,814	500	9,314	2,800
Albion Academy,...................	7,100	397	447	7,944	173	8,117	880
Alfred "	14,176	398	1,295	15,869	6,670	22,539	9,139
Amenia Seminary,..................	18,200	1,698	1,000	20,898	11,104	32,002	12,744
Ames Academy, ...	2,440	280	166	2,886	316	3,202	110
Amsterdam Female Seminary,.........	8,000	390	500	8,890	180	9,070	485
Argyle Academy;	3,100	194	154	3,448	200	3,648	214
Auburn "	8,313	164	277	8,754	none.	8,754	1,314
Auburn Female Seminary, ...	3,500	153	212	3,865	2,963	6,828	6,425
Augusta Academy, ...	2,276	301	349	2,926	none.	2,926	none.
Aurora "	3,065	566	357	3,988	355	4,343	140

Ball Seminary,	3,810	159	460	4,429	none.	4,429	none.
Binghamton Academy,	5,875	650	275	6,800	none.	6,800	none.
Brockport Collegiate Institute,	23,250	198	300	23,748	478	24,226	5,290
Brookfield Academy,	2,750	156	178	3,084	50	3,134	240
Brooklyn Female Academy,	37,333	1,220	1,256	39,809	4,155	43,964	8,000
Cambridge Washington Academy,	4,250	498	264	5,012	2,915	7,927	465
Canandaigua Academy,	12,000	400	1,050	13,450	15,682	29,132	none.
Canajoharie "	4,700	277	259	5,236	none.	5,236	1,016
Canton "	3,150	180	170	3,500	2,550	6,050	none.
Cary Collegiate Seminary,	6,350	374	441	7,165	none.	7,165	400
Cayuga Academy,	5,025	396	579	6,000	7,382	13,382	none.
Champlain Academy,	5,504	272	515	6,291	375	6,666	990
Cherry Valley "	3,500	211	642	4,353	none.	4,353	250
Chester "	2,945	217	290	3,452	none.	3,452	148
Claverack "	2,700	221	216	3,137	none.	3,137	18
Clinton "	2,500	232	168	2,900	512	3,412	none.
Clinton Grammar School,	2,500	250	221	2,971	none.	2,971	60
Clinton Liberal Institute,	10,350	1,000	255	11,605	10,682	22,287	4,452
Clover Street Seminary,	5,950	225	152	6,327	none.	6,327	2,500
Cortland Academy,	4,500	1,100	827	6,427	5,649	12,076	none.
Cortlandville "	2,800	461	365	3,626	none.	3,626	none.
Coxsackie "	3,600	150	150	3,900	none.	3,900	605
Delaware "	3,000	1,026	200	4,226	5,127	9,353	none.
Delaware Literary Institute,	6,760	520	483	7,763	none.	7,763	33
De Ruyter Institute,	9,000	345	641	9,986	687	10,673	827
Dutchess County Academy,	11,300	190	176	11,666	none.	11,666	1,277
East Bloomfield "	5,000	360	302	5,662	442	6,104	552

SCHEDULE No. 3.—(CONTINUED.)

NAMES OF ACADEMIES.	PERMANENT ENDOWMENTS.			Total value of lot, buildings, library, and apparatus,	Other academic property.	Total value of the whole.	Debts due by academy
	Value of academy lot and buildings.	Value of library.	Value of apparatus.				
Elmira Academy,	$3,255	$316	$288	$3,859	none.	$3,859	$375
Erasmus Hall Academy,	9,500	2,180	496	12,176	4,769	16,945	75
Fairfield Academy,	8,700	400	840	9,940	575	10,515	416
Falley Seminary,	3,000	240	190	3,430	10,000	13,430	3,000
Farmers' Hall Academy,	3,400	230	182	3,812	233	4,045	none.
Fayetteville "	2,900	190	235	3,325	none.	3,325	400
Fort Covington "	2,700	200	161	3,061	800	3,861	58
Franklin " (Malone,)	4,500	300	213	5,013	5,316	10,329	908
Franklin " (Prattsburgh,)	3,200	1,183	419	4,802	3,305	8,107	510
Fredonia "	3,300	2,344	620	6,264	2,106	8,370	none.
Friendship "	2,907	155	168	3,230	none.	3,230	495
Galway "	3,450	177	317	3,944	none.	3,944	none.
Genesee Wesleyan Seminary,	36,500	1,968	1,460	39,928	16,250	56,178	8,528
Genesee and Wyoming Seminary,	5,500	687	425	6,612	5,027	11,639	none.
Geneseo Academy,	8,600	591	300	9,491	510	10,001	228
Genoa "	3,180	178	202	3,560	none.	3,560	none.
Gilbertsville " and Col. Inst.,	3,805	386	401	4,592	none.	4,592	55
Glens Falls "	4,000	253	263	4,516	none.	4,516	344
Gouverneur Wesleyan Seminary,	6,500	384	400	7,284	525	7,809	5,091

Grammar School of Columbia College,..	13,000	362	400	13,762	none.	13,762	none.
Grammar School, Univ. City of N. York,	....	....	....	....	....	....	none.
Granville Academy,..................	2,800	188	270	3,258	40	3,298	none.
Greenbush and Schodack Academy, ...	3,200	150	157	3,507	none.	3,507	650
Greenville Academy,................	2,400	180	161	2,741	112	2,853	none.
Groton "	4,610	334	350	5,294	none.	5,294	1,000
Hamilton "	4,650	800	165	5,615	600	6,215	1,400
Hartwick Seminary,.................	7,800	1,155	202	9,157	19,050	28,207	none.
Hobart Hall Institute,...............	3,660	469	222	4,351	none.	4,351	not stated
Hubbardsville Academy,............	2,250	153	154	2,557	none.	2,557	40
Hudson "	3,200	189	249	3,638	650	4,288	28
Ithaca "	12,500	434	1,159	14,093	7,021	21,114	4,792
Jamestown "	3,200	203	227	3,630	200	3,830	295
Jefferson "	3,400	166	475	4,041	3,000	7,041	863
Jefferson County Institute,...........	9,950	623	1,679	12,252	455	12,707	250
Johnstown Academy,...............	3,300	189	180	3,669	803	4,472	none.
Jordan "	3,275	300	284	3,859	none.	3,859	none.
Keeseville "	3,600	281	300	4,181	150	4,331	none.
Kinderhook "	4,000	600	400	5,000	250	5,250	none.
Kingsboro' "	3,700	211	507	4,418	none.	4,418	80
Kingston "	7,500	500	588	8,588	453	9,041	882
Lansingburgh "	3,700	570	343	4,613	4,300	8,913	none.
Le Roy Female Seminary,...........	12,200	573	162	12,935	1,328	14,263	700
Liberty Normal Institute,............	1,250	161	172	1,583	1,200	2,783	none.
Lowville Academy,................	6,400	167	417	6,984	1,983	8,967	1,635
Macedon "	2,410	153	168	2,731	176	2,907	243
Manlius "	2,500	273	153	2,926	960	3,886	not stated

SCHEDULE No. 3.—(Continued.)

NAMES OF ACADEMIES.	PERMANENT ENDOWMENTS.			Total value of lot, buildings, library, and apparatus.	Other academic property.	Total value of the whole.	Debts due by academy
	Value of academy lot and buildings.	Value of library.	Value of apparatus.				
Mayville Academy,	$3,500	$152	$186	$3,838	none.	3,838	$383
Mexico "	3,800	640	460	4,900	none.	4,900	125
Middlebury "	5,500	722	474	6,696	3,690	10,386	91
Millville "	3,400	180	300	3,880	none.	3,880	206
Monroe "	5,693	159	189	6,041	745	6,786	1,630
Montgomery "	5,500	150	350	6,000	none.	6,000	none.
Moravia Institute,	2,070	409	378	2,857	none.	2,857	none.
Mount Pleasant Academy,	16,000	1,020	416	17,436	3,200	20,636	6,590
Munro "	4,300	308	174	4,782	23,841	28,623	48
New-Berlin "	3,300	176	174	3,650	none.	3,650	214
Newburgh "	11,000	370	260	11,630	150	11,780	3,250
New-Paltz "	6,900	282	525	7,707	400	8,107	none.
New-York Free "	74,790	369	2,468	77,627	....	77,627	....
North Salem "	2,930	524	252	3,706	none.	3,706	none.
Norwich "	5,939	455	374	6,768	1,375	8,143	none.
Nunda Literary Institute,	2,700	192	237	3,129	none.	3,129	none.
Ogdensburgh Academy,	7,500	393	392	8,285	none.	8,285	none.
Oneida Conference Seminary,	16,000	1,328	2,251	19,579	6,650	26,229	2,000
Onondaga Academy,	6,400	456	173	7,029	5,309	12,838	902

Ontario Female Seminary,	12,000	478	848	13,326	none.	13,326	10,000
Ovid Academy,	4,400	330	190	4,920	4,679	9,599	266
Owego "	3,500	231	202	3,933	3,183	7,116	none.
Oxford "	3,400	922	250	4,762	3,068	7,830	261
Peekskill Academy,	6,200	207	267	6,674	128	6,802	none.
Phipps Union Seminary,	9,000	416	212	9,628	none.	9,628	1,500
Plattsburgh Academy,	4,000	215	488	4,703	436	5,139	none.
Pompey "	5,400	374	190	5,964	4,263	10,227	864
Poughkeepsie Female Academy,	15,963	186	151	16,300	300	16,600	88
Prattsville Academy,	3,250	150	151	3,551	none.	3,551	none.
Red Creek Union Academy,	4,100	206	287	4,593	none.	4,593	525
Rensselaer Institute,	7,650	1,035	775	9,460	7,175	16,635	1,265
Rensselaerville Academy,	2,560	169	152	2,881	80	2,961	none.
Rhinebeck "	4,070	292	360	4,722	130	4,852	1,900
Riga "	5,000	224	298	5,522	none.	5,522	462
Rochester Collegiate Institute,	9,000	328	2,065	11,393	none.	11,393	781
Rochester Female Academy,	6,775	176	160	7,111	774	7,885	none.
Rome Academy,	9,000	177	173	9,350	520	9,870	1,147
Rutgers Female Institute,	31,500	2,141	2,531	36,172	8,196	44,368	800
Sag Harbor Institute,	2,300	125	147	2,572	not stated	2,572	30
St. Lawrence Academy,	9,200	428	664	10,292	804	11,096	2,107
Sand Lake "	4,000	181	213	4,393	none.	4,393	1,093
Sauquoit "	2,500	171	196	2,867	none.	2,867	none.
Schenectady Lyceum and Academy,	3,100	590	219	3,909	45	3,954	none.
Schoharie Academy,	3,350	272	171	3,793	not stated	3,793	none.
Schuylerville "	2,200	173	269	2,642	10	2,652	none.
Seneca Falls "	3,000	438	692	4,130	4,000	8,130	none.

SCHEDULE No. 3.—(CONTINUED.)

NAMES OF ACADEMIES.	PERMANENT ENDOWMENTS.			Total value of lot, buildings, library, and apparatus.	Other academic property.	Total value of the whole.	Debts due by academy
	Value of academy lot and buildings.	Value of library.	Value of apparatus.				
Seward Female Seminary,	$8,000	$401	$203	$8,604	$925	$9,529	none.
Sherburne Union Academy,	2,500	521	241	3,262	none.	3,262	860
Spencertown "	2,850	159	155	3,164	not stated	3,164	190
Springville "	3,200	180	209	3,589	100	3,689	400
S. S. Seward Institute,	5,500	150	150	5,800	20,000	25,800	none.
Starkey Seminary,	6,850	539	420	7,809	none.	7,809	1,000
Stillwater Seminary,	4,250	361	470	5,081	none.	5,081	2,000
Troy Academy,	7,600	300	450	8,350	102	8,452	none.
Troy Female Seminary,	12,100	1,379	1,732	15,211	none.	15,211	2,877
Union Hall Academy,	14,800	634	369	15,803	439	16,242	3,200
Union Literary Society,	5,000	121	107	5,228	400	5,628	442
Union Village Academy,	4,315	337	421	5,073	391	5,464	none.
Utica Academy,	8,000	235	337	8,572	600	9,172	75
Utica Female Academy,	23,000	154	257	23,411	none.	23,411	29
Vernon "	3,600	320	400	4,320	none.	4,320	none.
Wallkill "	6,500	330	200	7,030	122	7,152	2,075
Walworth "	4,200	164	156	4,520	8	4,528	9
Washington "	5,050	350	650	6,050	none.	6,050	284
Westfield "	3,592	478	212	4,282	none.	4,282	none.

Whitehall Academy,................	3,367	164	170	3,701	none.	3,701	457
Whitesboro Academy,..............	2,700	100	100	2,900	not stated	2,900	400
Whitestown Seminary,..............	11,500	880	600	12,980	4,000	12,980	4,755
Wilson Collegiate Institute,...........	2,685	627	466	3,778	none.	3,778	none.
Windsor Academy,..................	3,235	189	190	3,614	none.	3,614	1,017
Yates "	2,943	324	649	3,916	none.	3,916	280
	$1,176,548	$69,881	$70,018	$1,316,447	$289,617	$1,606,064	$154,740

SCHEDULE No. 4.

Containing abstracts of Academic Reports for 1848, exhibiting a statement of the Annual Revenue and Expenditures of the several Academies from which reports were received.

Names of Academies.	ANNUAL REVENUE.			Total annual revenue.	ANNUAL EXPENDITURE.				Total annual expenditure.
	Tuition money for year ending on date of report.	Interest or income of academic property accrued during said year.	Am't received during said year, from Regents on their annual apportionment.		Salaries or compensation of teachers.	Interest accrued during said year on debts due by academy.	Repairs of buildings or other academic property.	Fuel and other incidental expenses.	
Academy at Little Falls, ...	$887	$53	$377	$1,317	$1,133	$31	$74	$185	$1,423
Addison Academy, ...	751	none.	138	889	954	none.	83	none.	1,037
Albany do	4,689	598	449	5,736	4,690	none.	not stated	896	5,586
Albany Female do	7,300	207	912	8,419	4,361	140	877	1,178	6,556
Albany Female do	1,209	203	210	1,622	1,300	196	65	60	1,621
Albion do	809	216	375	1,400	1,095	35	52	128	1,310
Alfred do	2,391	4,164	808	7,363	3,135	581	600	3,790	8,106
Amenia Seminary, ...	3,004	1,600	611	5,215	2,682	890	300	450	4,322
Ames Academy, ...	284	18	146	448	437	8	8	35	488
Amsterdam Female Seminary,	914	175	159	1,248	1,073	40	25	none.	1,138
Argyle Academy, ...	751	none.	242	993	870	none.	none.	123	993
Auburn do	1,322	none.	335	1,657	1,251	15	1,014	160	2,440
Auburn Female Seminary, ...	2,076	287	364	2,727	2,072	270	not stated	387	2,729

Augusta Academy, ...	195	none.	143	338	400	none.	not stated	22	422
Aurora do	586	75	162	823	654	10	none.	20	684
Ball Seminary, ...	366	none.	175	541	541	none.	none.	60	601
Binghamton Academy, ...	876	none.	244	1,120	1,047	none.	265	48	1,360
Brockport Collegiate Institute,	2,030	none.	422	2,452	1,950	none.	282	318	2,550
Brookfield Academy, ...	400	none.	252	652	715	none.	25	45	785
Brooklyn Female Academy, ..	15,154	559	800	16,513	10,600	520	not stated	2,800	13,920
Cambridge Washington do ..	1,805	79	298	2,182	1,865	58	88	125	2,136
Canandaigua Academy, ...	1,295	1,063	292	2,650	2,036	none.	300	245	2,581
Canajoharie do	307	none.	242	549	481	16	10	83	590
Canton do	585	178	136	899	800	none.	none.	55	855
Cary Collegiate Seminary, ...	860	none.	380	1,240	1,200	nt. st'd	45	100	1,345
Cayuga Academy, ...	902	300	255	1,457	1,157	none.	58	50	1,265
Champlain do	710	47	64	821	732	50	5	63	850
Cherry Valley do	482	none.	364	846	454	nt. st'd	none.	28	482
Chester do	550	90	80	720	580	10	81	32	703
Claverack do	435	30	64	529	498	none.	47	20	565
Clinton do	358	38	37	433	358	none.	38	9	405
Clinton Grammar School, ...	1,070	none.	239	1,309	1,259	nt. st'd	not stated	40	1,299
Clinton Liberal Institute, ...	1,732	116	471	2,319	2,326	215	456	131	3,128
Clover-street Seminary, ...	1,101	none.	250	1,351	1,044	175	50	100	1,369
Cortland Academy, ...	2,645	247	534	3,426	2,497	none.	92	330	2,919
Cortlandville do	1,160	none.	353	1,513	1,272	none.	60	70	1,402
Coxsackie do	530	none.	90	620	510	42	23	43	618
Delaware do	807	294	220	1,321	1,185	none.	2	none.	1,187
Delaware Literary Institute, ..	1,271	none.	455	1,726	1,524	nt. st'd	250	106	1,880
De Ruyter Institute, ...	1,084	60	343	1,487	1,512	10	122	273	1,917
Dutchess County Academy, ..	825	none.	138	963	638	448	5	40	1,131

SCHEDULE No. 4.—(Continued.)

Names of Academies.	ANNUAL REVENUE.			Total annual revenue.	ANNUAL EXPENDITURE.				Total annual expenditure.
	Tuition money for year ending on date of report.	Interest or income of academic property accrued during said year.	Am't received during said year, from Regent, on their annual apportionment.		Salaries or compensation of teachers.	Interest accrued during said year on debts due by academy.	Repairs of buildings or other academic property.	Fuel and other incidental expenses.	
East Bloomfield Academy....	871	70	250	1,191	987	none.	none.	204	1,191
Elmira do	1,950	none.	446	2,396	1,800	nt. st'd	17	160	1,977
Erasmus Hall do	1,296	491	128	1,915	1,560	none.	242	236	2,038
Fairfield do	1,492	550	412	2,454	1,183	nt. st'd	358	116	1,657
Falley Seminary	1,351	none.	218	1,569	1,287	84	22	147	1,540
Farmer's Hall Academy, ...	2,400	146	292	2,838	2,692	none.	190	18	2,900
Fayetteville do	500	none.	125	625	500	28	10	29	567
Fort Covington do	364	56	10	430	388	nt. st'd	18	36	442
Franklin Academy, (Malone),	782	328	239	1,349	894	44	49	148	1,135
Franklin do (Prattsburgh),	752	230	399	1,381	1,025	nt. st'd	105	263	1,393
Fredonia do	1,125	88	532	1,745	1,283	none.	40	110	1,433
Friendship do	218	none.	none.	218	183	none.	105	24	312
Galway do	125	none.	128	253	280	none.	not stated	none.	280
Genesee Wesleyan Seminary,.	4,316	675	872	5,863	3,055	583	1,575	1,225	6,438
Genesee & Wyoming do ..	942	280	292	1,514	1,200	none.	none.	254	1,454

Geneseo Academy, ...	1,023	none.	154	1,177	1,095	not st'd	631	100	1,826
Genoa do	524	none.	260	784	735	none.	50	50	835
Gilbertsville do & Co. Ins.,..	372	5	274	651	557	3	48	42	650
Glen's Falls do	1,380	100	332	1,812	1,750	30	7	65	1,852
Gouverneur Wesleyan Sem'ry,	1,666	none.	364	2,030	1,570	333	90	325	2,318
Grammar School of Col. Col'e,	8,856	none.	529	9,385	7,150	none.	150	1,949	9,249
Grammar Sch. Un. city of N. Y.	6,298	none.	252	6,550	4,488	none.	not stated	1,955	6,443
Granville Academy, ...	463	none.	189	652	606	none.	21	44	671
Greenbush & Schodack Aca'y,	425	none.	21	446	446	not st'd	not stated	not stated	446
Greenville Academy,........	300	7	50	357	341	none.	15	1	357
Groton do	505	none.	284	789	790	49	not stated	50	889
Hamilton do	1,550	none.	268	1,818	1,640	98	12	78	1,828
Hartwick Seminary, ...	312	1,112	80	1,504	1,202	none.	25	240	1,467
Hobart Hall Institute, ...	510	none.	112	622	568	33	12	19	632
Hubbardsville Academy, ...	83	none.	none.	83	120	none.	none.	3	123
Hudson do	996	263	223	1,482	1,442	none.	18	29	1,489
Ithaca do	2,018	449	455	2,922	1,825	331	108	658	2,922
Jamestown do	590	none.	303	893	808	not st'd	15	50	868
Jefferson do	206	134	none	340	300	53	not stated	15	368
Jefferson county Institute,....	1,656	112	266	2,034	1,780	not st'd	172	101	2,053
Johnstown Academy, ...	388	53	93	534	480	none.	25	not stated	505
Jordan do	639	50	287	976	876	none.	50	50	976
Keeseville do	1,307	none.	154	1,461	1,316	none.	not stated	145	1,461
Kinderhook do	2,300	none.	279	2,579	2,550	none.	29	200	2,779
Kingsboro' do	723	none.	122	845	845	2	20	not stated	867
Kingston do	2,721	none.	385	3,106	2,456	37	42	500	3,035
Lansingburgh do	893	374	103	1,370	1,012	31	38	139	1,220
Le Roy Female Seminary, ...	2,750	none.	532	3,282	2,550	none.	600	170	3,320

SCHEDULE No. 4.—(CONTINUED.)

Names of Academies.	ANNUAL REVENUE.			Total annual revenue.	ANNUAL EXPENDITURE.				Total annual expenditure.
	Tuition money for year ending on date of report.	Interest or income of academic property accrued during said year.	Am't received during said year, from Regents on their annual apportionment.		Salaries or compensation of teachers.	Interest accrued during said year on debts due by academy.	Repairs of buildings or other academic property.	Fuel and other incidental expenses.	
Liberty Normal Institute, ...	1,234	25	none.	1,259	1,034	none.	25	50	1,109
Lowville Academy, ...	610	121	202	933	900	21	26	90	1,037
Macedon do	1,062	146	380	1,588	1,291	8	114	102	1,515
Manlius do	457	42	159	658	780	not st'd	32	not stated	812
Mayville do	408	4	none.	412	408	14	20	28	470
Mexico do	1,000	65	351	1,416	1,225	9	150	142	1,526
Middleburgh do	771	251	204	1,226	1,178	6	5	30	1,219
Millville do	650	none.	103	753	950	20	50	25	1,045
Monroe do	351	none.	138	489	463	none.	none.	26	489
Montgomery do	873	13	239	1,125	993	none.	28	80	1,101
Moravia Institute	388	none.	146	534	500	none.	55	15	570
Mount Pleasant Academy, ...	2,492	773	93	3,358	1,615	398	290	48	2,351
Munro do	585	1,602	223	2,410	1,300	none.	38	163	1,501
New-Berlin do	483	none.	237	720	650	14	5	30	699
Newburgh do	1,590	500	170	2,260	1,960	227	20	50	2,257

New-Paltz do	605	150	74	829	679	none	122	not stated	801
New-York Free do ...	....	....	none.	....	9,180	......	....	1,747	10,927
North Salem do	519	65	186	770	740	none.	none.	25	765
Norwich Academy, ...	1,045	96	345	1,486	1,394	none.	17	75	1,486
Nunda Literary Institute, ...	530	none.	120	650	623	none.	125	26	774
Ogdensburgh Academy, ...	937	413	268	1,618	1,464	none.	80	74	1,618
Oneida Conference Seminary,.	2,385	1,430	646	4,461	2,433	245	217	269	3,164
Onondaga Academy, ...	900	332	146	1,378	1,131	41	35	110	1,347
Ontario Female Seminary, ...	4,280	none.	446	4,726	2,012	700	375	463	3,550
Ovid Academy, ...	507	227	186	920	609	none.	15	69	693
Owego do	1,100	161	159	1,420	1,260	none.	255	44	1,559
Oxford do	1,029	140	412	1,581	1,463	not st'd	12	145	1,620
Peekskill do	1,425	421	138	1,984	1,563	21	184	34	1,802
Phipp's Union Seminary, ...	1,933	none.	335	2,268	1,816	105	not stated	222	2,143
Plattsburgh Academy, ...	1,779	17	324	2,120	1,950	none.	64	106	2,120
Pompey do	413	363	90	866	704	24	25	107	860
Poughkeepsie Fem. Academy,	2,102	123	255	2,480	1,937	none.	165	45	2,147
Prattsville do	220	not stated	none.	220	206	not st'd	50	14	270
Red Creek Union do	1,075	75	321	1,471	1,113	42	50	191	1,396
Rensselaer Institute, ...	1,364	450	104	1,918	1,360	66	55	142	1,623
Rensselaerville Academy, ...	575	none.	151	726	705	none.	72	39	816
Rhinebeck do	825	none.	138	963	863	124	none.	61	1,048
Riga do	813	100	260	1,173	893	not st'd	242	47	1,182
Rochester Collegiate Institute,	2,280	none.	266	2,546	2,144	none.	18	295	2,457
Rochester Female Academy, .	1,706	none.	96	1,802	1,315	none.	23	204	1,542
Rome do	2,573	none.	none.	2,573	2,695	3	20	351	3,069
Rutgers Female Institute, ...	16,933	353	638	17,924	10,760	none.	409	6,658	17,827
Sag Harbor Institute, ...	440	none.	none.	440	408	none.	670	30	1,108

SCHEDULE No. 4.—(CONTINUED.)

Names of Academies.	ANNUAL REVENUE.			Total annual revenue.	ANNUAL EXPENDITURE.				Total annual expenditure.
	Tuition money for year ending on date of report.	Interest or income of academic property accrued during said year.	Am't received during said year, from Regents on their annual apportionment.		Salaries or compensation of teachers.	Interest accrued during said year on debts due by academy	Repairs of buildings or other academic property.	Fuel and other incidental expenses.	
St. Lawrence Academy, ...	1,183	97	284	1,564	1,332	180	132	147	1,781
Sand Lake do	945	326	143	1,414	1,000	26	50	87	1,163
Sanquoit do	503	none.	none.	503	722	none.	15	40	777
Schenectady Lyceum & Aca'y,	2,623	none.	524	3,147	2,754	none.	58	205	3,017
Schoharie Academy, ...	1,271	50	260	1,581	1,437	none.	50	95	1,582
Schuylerville do	693	none.	202	895	740	none.	70	85	895
Seneca Falls do	1,053	280	191	1,524	1,050	none.	60	90	1,200
Seward Female Seminary, ...	853	none.	207	1,060	980	none.	20	27	1,027
Sherburne Union Academy, ..	382	none.	170	552	410	28	20	15	473
Spencertown do	380	none.	50	430	380	12	2	18	412
Springville do	979	none.	274	1,253	1,118	28	not stated	79	1,225
S. S. Seward Institute, ...	476	375	170	1,021	800	none.	none.	75	875
Starkey Seminary, ...	450	40	80	570	570	none.	21	50	641
Stillwater Seminary, ...	554	none.	188	742	717	nt. st'd	not stated	25	742
Troy Academy, ...	1,537	none.	194	1,731	1,388	none.	81	55	1,524
Troy Female Seminary, ...	7,368	140	574	8,082	5,850	140	not stated	500	6,490

Union Hall Academy, ...	3,043	670	391	4,104	3,434	192	78	169	3,873
Union Library Society, ...	447	103	250	800	650	21	74	18	773
Union Village Academy, ...	1,006	none.	157	1,163	1,103	none.	none.	60	1,163
Utica do	744	none.	125	869	754	none.	4	124	882
Utica Female do	3,000	208	407	3,615	2,532	none.	73	363	2,968
Vernon do	400	none.	85	485	485	none.	none.	not stated	485
Wallkill do	1,241	168	173	1,582	1,416	140	2	24	1,582
Walworth do	458	50	146	654	584	none.	50	30	654
Washington do	340	75	66	481	406	nt. st'd	40	45	491
Westfield do	1,142	28	306	1,476	1,260	none.	69	103	1,432
Whitehall do	871	none.	79	950	825	29	401	108	1,363
Whitesboro' do	131	not stated	111	242	321	not s'td	15	25	361
Whitestown Seminary, ...	1,460	378	393	2,231	1,484	350	291	507	2,632
Wilson Collegiate Institute, ..	966	none.	393	1,359	1,295	none.	not stated	44	1,339
Windsor Academy, ...	480	none.	none.	480	480	not st'd	none.	not stated	480
Yates do	904	none.	223	1,127	933	28	10	56	1,027
	$227,576	$27,716	$38,908	$294,200	$232,375	$8,761	$16,155	$38,357	$295,648

SCHEDULE No. 5.

Containing a statement of all moneys appropriated to Academies from the Literature Fund by the Regents of the University, for the purchase of books and philosophical apparatus for the use of such Academies, pursuant to the act of the Legislature relative to the distribution and application of the revenue of said Fund, passed April 22, 1834; such appropriation having been made to such academies only as had themselves raised by contribution, from sources other than their own corporate property, funds equal to the amount so appropriated, to be expended in the same manner

Time when granted.			Names of Academies.	Am't granted.
July	1,	1835	Lowville,	$112 00
	1,		St. Lawrence,	150 00
	1,		Ovid,	90 00
	1,		Albany Female Seminary,	250 00
	1,		Clarkson,	250 00
	1,		Fredonia,	250 00
	1,		Jefferson,	250 00
	1,		Rensselaer Oswego,	250 00
	1,		Utica,	250 00
Jan.	19,	1836	Albany Female Academy,	250 00
Feb.	26,		Springville,	250 00
April	29,		Jefferson,	250 00
May	10,		Cortland,	250 00
	10,		Gaines,	183 00
Feb.	28,	1837	Albany Female Academy,	250 00
	28,		Cortland,	250 00
	28,		Fredonia,	250 00
	28,		Ithaca,	250 00
	28,		Ontario Female Seminary,	250 00
	28,		Rochester High School,	250 00
March	31,		Albany Female Seminary,	250 00
	31,		Albany Academy,	250 00
May	15,		Amenia Seminary,	100 00
September,			Washington,	60 00
March	6,	1838	Auburn,	125 00
	6,		Clinton Liberal Institute,	250 00
	6,		Oneida Institute,	250 00
	6,		Cortland,	250 00
	6,		Albany Female Seminary,	250 00
			Carried forward,	$6,270 00

SCHEDULE No. 5.—(CONTINUED.)

Time when granted.	Names of Academies.	Am't granted.
	Brought forward,	$6270 00
May 6, 1838	Rochester High School,	250 00
6,	Albany Female Academy,	250 00
6,	Re Ruyter Institute,	250 00
6,	Gouverneur High School,	100 00
6,	Hamilton,	250 00
6,	Troy Female Seminary,	250 00
Jan. 10, 1839	Plattsburgh,	350 00
29,	Ithaca,	250 00
29,	Canajoharie,	63 00
29,	Amenia,	149 90
Feb. 5, 1839	Hamilton,	200 00
5,	Groton,	250 00
5,	Mount Pleasant,	250 00
5,	Fayetteville,	250 00
5,	Kingston,	110 00
5,	Ontario Female Seminary,	20 00
12,	Genesee Wesleyan Seminary,	250 00
12,	Galway,	250 00
12,	Stillwater,	250 00
March 15,	Whitesboro',	50 00
15,	Waterford,	100 00
15,	Fulton Female Seminary,	100 00
15,	Manlius,	134 00
15,	Syracuse,	250 00
15,	Schoharie,	78 00
15,	Munro,	75 00
15,	Black River L. and R. Institute,	250 00
15,	Peekskill,	125 00
19,	Batavia Female Academy,	94 25
29,	Vernon,	250 00
Feb. 29, 1840	Poughkeepsie Female Academy,	62 64
29,	Claverack,	59 00
29,	Schenectady L. and A.,	50 00
29,	Canton,	85 00
29,	Fort Covington,	118 00
29,	Johnstown,	100 00
29,	Clinton Grammar School,	218 00
29,	Fulton Female Seminary,	65 00
29,	Hobart Hall Institute,	65 00
29,	Whitesboro',	50 00
29,	Auburn Female Seminary,	250 00
	Carried forward,	$12,791 79

SCHEDULE No. 5.—(CONTINUED.)

Time when granted.	Names of Academies.	Am't granted.
	Brought forward,	$12,791 79
Feb. 29,	Seneca Falls,	129 50
29,	Gaines,	53 00
29,	Mendon,	150 00
29,	Munro,	70 00
29,	Phipps Union Seminary,	60 00
29,	Westfield,	200 00
29,	Farmers' Hall,	40 00
29,	Troy Female Seminary,	250 00
29,	Lansingburgh,	125 00
29,	Canajoharie,	100 00
29,	Cambridge Washington,	125 00
29,	Clermont,	51 00
29,	Stillwater,	150 00
29,	Ames,	30 00
29,	Mount Pleasant,	250 00
29,	Redhook,	50 00
29,	Amenia Seminary,	141 00
29,	East Bloomfield,	250 00
March 31,	Delaware Literary Institute,	250 00
May, 18, 1841	Rutgers Female Institute,	250 00
18,	Fairfield,	250 00
18,	Hudson,	150 00
18,	Moravia Institute,	95 00
18,	Rensselaer Oswego,	250 00
18,	Elmira,	100 00
18,	Millville,	250 00
18,	Herkimer,	150 00
18,	Oneida Conference Seminary,	250 00
18,	Gouverneur Wesleyan Seminary,	100 00
18,	Cambridge Washington,	50 00
18,	Utica Female Academy,	50 00
18,	Rhinebeck,	150 00
18,	Greenbush and Schodack,	150 00
18,	Albion,	150 00
18,	Mount Pleasant,	250 00
18,	Troy Female Seminary,	250 00
18,	Genesee Wesleyan Seminary,	250 00
18,	Argyle,	150 00
18,	Stillwater,	125 00
18,	Hobart Hall Institute,	150 00
	Carried forward,	$18,836 29

SCHEDULE No. 5.—(Continued.)

Time when granted.			Names of Academies.	Am't granted.
			Brought forward, ...	$18,836 29
May	18,	1841	Kingboro', ...	92 00
	18,		Aurora, ...	250 00
	18,		Troy, ...	250 00
	18,		Buffalo Lit. & Scientific Academy	100 00
	18,		Le Roy Female Seminay, ...	75 00
Jan.	25,	1842	Stillwater, ...	101 00
April	13,		Gilbertsville Acad'y & Col. Inst. .	250 00
	13,		Essex County Academy, ...	50 00
	13,		Livingston County High School, ..	105 00
	13,		Union Lit Society of Ellisburgh, ..	75 00
	13,		Glen's Falls Academy, ...	250 00
	13,		Coxsackie, do	25 00
	13,		Knoxville do	118 00
	13,		Amsterdam Female Seminary, ...	250 00
	13,		Delaware Academy, ...	250 00
	13,		Cayuga do	22 00
	13,		Augusta do	250 00
	13,		Brockport Collegiate Institute, ...	250 00
	13,		Syracuse Academy, ...	206 00
	13,		Lowville do	50 00
	13,		Vernon do	100 00
	13,		Oneida Conference Seminary, ...	250 00
	13,		Black River Lit. and Rel. Inst., ..	171 00
	13,		Ontario Female Seminary, ...	30 00
	13,		Gouverneur Wesleyan Seminary, ..	100 00
	13,		Amenia Seminary, ...	220 00
	13,		Troy Female Seminary, ...	250 00
March	21,	1843	Waterloo Academy, ...	250 00
	21,		Yates, do	175 50
	21,		Cortlandville do	150 00
	21,		Alfred do	200 00
	21,		Clinton Seminary, ...	68 41
	21,		Greenville Academy, ...	50 00
	21,		Binghamton do	164 97
	21,		Champlain do	247 00
	21,		De Lancey Institute, ...	150 00
Mar.	12,	1844	Schoharie Academy, ...	115 00
	12,		Livington County High School, ...	250 00
	12,		Phipps Union Seminary, ...	108 00
	12,		Moravia Institute, ...	80 00
	12,		Oneida Conference Seminary, ...	250 00
	12,		Black River Lit. & Rel. Inst., ...	150 00
			Carried forward, ...	$25,385 17

SCHEDULE No. 5.—(CONTINUED.)

Time when granted.	Names of Academies.	Am't granted.
	Brought forward, ...	$25,385 17
March 12, 1844	Genesee Wesleyan Seminary, ...	120 00
12,	Norwich Academy,............	250 00
12,	Walworth do	210 00
12,	Avon do	151 00
12,	Astoria Institute,..	250 00
12,	Ovid Academy,................	129 00
13,	Schenectady Lyceum and Academy,	62 00
12,	Lansingburgh Academy, ...	100 00
12,	Costlandville do	100 00
12,	Clinton Seminary,.............	100 00
12,	Binghamton Academy,.........	84 03
12,	East Bloomfield do	100 00
12,	Washington do	163 00
12,	Farmers' Hall do	75 00
12,	Claverack do	30 00
12,	Rochester Collegiate Institute,....	250 00
12,	Troy Female Seminary,.........	250 00
12,	Amenia Seminary,.............	46 00
Feb. 28, 1845	Peekskill Academy,...........	13 00
28,	Ball Seminary, ...	214 00
28,	Rensselaerville Academy,........	65 00
28,	Schenectady Lyceum and Academy,	30 00
28,	Academy at Little Falls, ...	250 00
28,	Fairfield Academy,............	50 00
28,	Ogdensburgh Academy, ...	250 00
28,	Elmira do	60 00
28,	Jordan do	250 00
28,	Macedon do	104 00
28,	Albion do	250 00
28,	Le Roy Female Seminary,.......	75 00
28,	Rochester Collegiate Institute,....	250 00
March 7, 1846	Schuylerville Academy,.........	27 00
7,	Wallkill do	60 00
7,	Wilson Collegiaie Institute,......	250 00
7,	Red Creek Union Academy,.....	150 00
7,	Cary Collegiate Institute,.......	250 00
7,	Fonda Academy,.............	165 00
7,	Whitestown Seminary,.........	250 00
7,	Sandlake Academy, ...	150 00
7,	Riga do	150 00
7,	Kingston do	250 00
	Carried forward,.........	$31,421 20

SCHEDULE No. 5.—(CONTINUED.)

Time when granted.			Names of Academies.	Am't granted.	
			Brought forward, ...	$31,421	20
March	7,	1846	Seneca Falls Academy,.	110	00
	7,		Clarkson do	80	00
	7,		Alfred do	200	00
	7,		Yates do	20	00
	7,		Ithaca do	151	00
	7,		Washington do	100	00
	7,		Binghamton do	225	50
	7,		Cortland do	120	00
May	28,	1847	Union Village do	45	00
	28,		Chester do	12	00
	28,		North Salem do	50	00
	28,		Middlebury do	100	00
	24,		Oxford do	250	00
	28,		Brooklyn Female Academy, ...	250	00
	28,		Genesee and Wyoming Seminary,.	115	00
	25,		Genoa Academy,..............	150	00
	28,		Onondaga Academy,............	60	00
	28,		Ball Seminary, ...	60	00
	28,		Red Creek Union Seminary.	25	00
	28,		Amsterdam Female Seminary,....	47	75
	28,		Kingsboro' Academy,...........	50	00
	28,		Wilson Collegiate Institute,......	126	33
	28,		Phipps Union Seminary,.........	100	00
	28,		Canajoharie Academy,..........	55	00
	28,		Oneida Conference Seminary,.....	250	00
	28,		Genesee Wesleyan Seminary, ...	250	00
	28,		Amenia Seminary, ...	250	00
Dec.	3,		Delaware Literary Institute,......	200	00
	3,		Spencertown Academy,..........	156	30
March	1,	1848	Brookfield Academy,...........	32	00
	1,		Sag Harbor Institute,...........	75	00
	1,		Starkey Seminary, ...	250	00
	1,		New Paltz Academy,...........	15	00
	1,		New Berlin Academy,..........	62	00
	1,		Seward Female Seminary,.......	100	00
	1,		Sand Lake Academy, ...	25	00
	1,		Academy at Little Falls,.........	103	00
	1,		De Ruyter Institute,............	54	00
	1,		Whitestown Seminary,..........	250	00
	1,		St. Lawrence Academy,.........	140	00
	1,		Brooklyn Female Academy,......	250	00
			Carried forward,..........	$36,383	08

SCHEDULE No. 5.—(CONTINUED.)

Time when granted.			Names of Academies.	Am't granted.
			Brought forward, ...	$36,383 08
March	1,		Wallkill Academy,............	20 00
	1,		Wilson Collegiate Institute,......	106 27
	1,		Kingsborough Academy, ...	43 00
	1,		Ball Seminary,................	50 00
	1,		Alfred Academy,..............	250 00
	1,		Rochester Collegiate Institute,....	250 00
	1,		Jefferson County Institute,.......	30 00
	1,		Oneida Conference Seminary, ...	250 00
	24,		Union Village Academy, ...	75 00
	24,		Stillwater Seminary,............	100 00
	24,		Yates Academy, ...	250 00
July,	27,		Nunda Literary Institute, ...	120 00
Feb.	28,	1849	Albany Academy, ...	150 00
	28,		Albany Female Seminary, ...	180 00
	28,		Brookfield Academy, ...	13 00
	28,		Canajoharie Academy, ...	21 00
	28,		Claverack Academy, ...	25 00
	28,		Clinton Grammar School, ...	25 00
	28,		De Ruyter Institute,............	245 00
	28,		Fairfield Academy,.............	28 00
	28,		Genoa Academy,...............	10 00
	28,		Greenbush and Schodack Academy,	15 00
	28,		Jordan Academy,..............	47 50
	28,		Kingsborough Academy,.........	132 00
	28,		Le Roy Female Seminary,.......	100 00
	28,		Onondaga Academy,............	60 00
	28,		Ontario Female Seminary,.......	250 00
	28,		Schuylerville Academy, ...	8 00
	28,		Wilson Collegiate Institute, ...	65 10
April	6,		Owego Academy,..............	60 00
April	12,		Rhinebeck Academy, ...	100 00
				$39,461 95

SUMMARY.

Years.	Am't moneys raised by Academies.	Amt of moneys granted by the Regents.	Total.
In the year 1832,	$1,852 00	$1,852 00	$3,704 00
" 1836,	1,183 00	1,183 00	2,366 00
" 1837,	2,110 00	2,110 00	4,220 00
" 1838,	2,475 00	2,475 00	4,950 00
" 1839,	4,049 15	4,049 15	8,098 30
" 1840,	3,597 14	3,597 14	7,194 28
" 1841,	4,337 00	4,337 00	8,674 00
" 1842,	3,373 00	3,373 00	6,746 00
" 1843,	1,455 88	1,455 88	2,911 76
" 1844,	3,423 03	3,423 03	6,846 06
" 1845,	1,861 00	1,861 00	3,722 00
" 1846,	2,708 50	2,708 50	5,417 00
" 1847,	2,602 38	2,602 38	5,204 76
" 1848,	2,900 27	2,900 27	5,800 54
" 1849,	1,534 60	1,534 60	3,069 20
	$39,461 95	$39,461 95	$78,923 90

The Regents are in possession of testimony, duly authenticated, showing that the whole of the above amount has been devoted to the purchase of books and apparatus, with the following exceptions:

Of the moneys raised and granted in the

year, 1835,	there is unaccounted for, ...	none.
" 1836,	"	$217 16
" 1837,	"	none.
" 1838,	"	none.
" 1839,	"	none.
" 1840,	"	133 56
" 1841,	"	none.
" 1842,	"	11 00
" 1843,	"	none.
" 1844,	"	100 00
" 1845,	"	none.
" 1846,	"	5 62
" 1847,	"	9 91
" 1848,	"	159 70
" 1849,	"	36 00
		$672 95

Since the presentation of this report, the whole of 1849 has been accounted for.

SCHEDULE No. 6.

Containing abstracts from the Academic Reports for 1848, *showing the number of departments and teachers ; the number of terms into which the academic year is divided, and the number of weeks of vacation in each year ; with the frequency of exercises in composition and declamation, and the number of students instructed gratuitously in the several academies from which such reports have been received.*

Names of Academies.	No. of Departments.	No. of Teachers.	No. of Teachers who intend to make teaching a profession.	No. of academic terms during the year.	No. of weeks vacation in the year.	How often exercised in composition and declamation. [Females in composition only.]	No. of students instructed gratuitously.
Academy at Little Falls, ...	2	3	2	3	11	once in 14 days.	5
Addison Academy, ...	3	3	3	3	6½	do	7
Albany Academy, ...	7	8	7	4	7	do	6
Albany Female Academy, ...	9	12	7	4	8	do	none.
Albany Female Seminary, ...	3	4	3	3	7	twice in 7 days	4
Albion Academy, ...	4	3	2	3	7	once in 21 days.	none.
Alfred Academy, ...	2	14	12	3	8½	once in 14 days.	16
Amenia Academy, ...	7	7	5	3	8	do	none.
Ames Academy, ...	2	2	2	3	10	do	none.
Amsterdam Female Seminary, ...	2	2	2	3	8	do	none.
Argyle Academy, ...	2	2	0	3	8	once in 20 days.	none.
Auburn Academy, ...	3	3	2	3	8	once in 14 days.	2
Auburn Female Seminary, ...	4	5	4	3	7	do	none.
Augusta Academy, ...	1	2	1	3	10	do	none.

Aurora Academy,	2	2	2	3	7	do	3
Ball Seminary,	2	3	1	3	7	do	none.
Binghamton Academy,	3	3	3	3	7	do	none.
Brockport Collegiate Institute,	2	8	5	3	10	do	none.
Brookfield Academy,	4	4	4	3	10	do	4
Brooklyn Female Academy,	5	20	20	4	8	do	11
Cambridge Washington Academy,	2	5	3	3	7	once in 21 days.	4
Canajoharie Academy,	2	2	not stated	3	8½	once in 14 days.	2
Canandaigua Academy,	4	4	4	3	8	do	2
Canton Academy,	2	3	1	3	8	do	none.
Cary Collegiate Seminary,	2	5	1	3	8	once in 18 days.	5
Cayuga Academy,	2	3	3	3	8	once in 14 days.	11
Champlain Academy,	2	3	3	3	8	do	none.
Cherry Valley Academy,	2	2	2	3	10	do	none.
Chester Academy,	1	2	1	2	6	do	none.
Claverack Academy,	1	1	1	2	6	do	none.
Clinton Academy,	1	1	none.	2	8	once in 7 days.	none.
Clinton Grammar School,	2	5	3	3	11	once in 14 days.	none.
Clinton Liberal Institute,	8	7	6	3	10	do	none.
Clover Street Seminary,	3	5	4	2	8	once in 28 days.	2
Cortland Academy,	2	6	6	3	9	once in 14 days.	none.
Cortlandville Academy,	2	5	5	3	10	do	none.
Coxsackie Academy,	2	2	2	3	8	do	none.
Delaware Academy,	2	4	2	3	10	do	none.
Delaware Literary Institute,	2	10	7	3	10	once in 7 days.	none.
De Ruyter Institute,	4	6	6	3	10	once in 14 days.	5
Dutchess County Academy,	1	3	not stated	2	6	do	2
East Bloomfield Academy,	2	3	2	3	9	do	12

SCHEDULE No. 6.—(CONTINUED.)

Names of Academies.	No. of Departments.	No. of Teachers.	No. of Teachers who intend to make teaching a profession.	No. of academic terms during the year.	No. of weeks vacation in the year.	How often exercised in composition and declamation. [Females in composition only.]	No. of students instructed gratuitously.
Elmira Academy,	2	5	4	3	10	once in 21 days.	4
Erasmus Hall Academy,	2	5	5	2	6	once in 14 days.	none.
Fairfield Academy,	2	5	3	3	11	do	none.
Falley Seminary,	3	5	5	3	10	do	1
Farmer's Hall Academy,	2	7	3	2	8	do	none.
Fayetteville Academy,	2	3	2	3	10	do	none.
Fort Covington Academy,	2	2	not stated	3	7	do	none.
Franklin Academy,	2	2	none.	3	7	do	4
Franklin Academy,	2	3	2	3	7	do	none.
Fredonia Academy,	2	3	1	3	7	do	none.
Friendship Academy,	4	3	3	3	10	do	none.
Galway Academy,	2	1	none.	3	8	once in 21 days.	1
Genesee Wesleyan Seminary,	7	10	8	3	9	once in 14 days.	3
Genesee and Wyoming Seminary,	3	4	4	3	7	do	none.
Geneseo Academy,	2	5	3	3	10	do	none.
Genoa Academy,	2	3	2	3	9	do	none.
Gilbertsville Academy and Coll. Inst.	2	3	2	3	10	do	10
Glen's Falls Academy,	4	5	4	3	7	do	none.
Gouverneur Wesleyan Seminary,	6	5	3	3	8	do	none.

Grammar School of Columbia Coll., ..	3	12	12	4	6	e. on. in 7 days, d. on. in 14 d's	4
Grammar School, Unive'ty City of N. Y.	2	7	6	1	6	o. in 3 w. o. in 2 w. d'g r'eh. y's	3
Granville Academy, ...	1	1	1	3	6	once in 14 days.	none.
Greenbush and Schodack Academy...	2	2	not stated	2	8	do	none.
Greenville Academy, ...	2	1	not stated	4	8	do	none.
Groton Academy, ...	3	2	2	3	7	do	4
Hamilton Academy, ...	4	4	3	3	10	do	7
Hartwick Seminary, ...	3	3	2	3	10	do	not stated
Hobart Hall Institute,.	2	3	3	3	6	do	none.
Hubbardsville Academy,............	2	1	1	3	10	do	none.
Hudson Academy,................	2	2	none.	2	8	do	6
Ithaca Academy,.................	3	5	4	3	9	do	none.
Jamestown Academy, ...	2	2	1	3	7	do	none.
Jefferson Academy, ...	1	1	1	3	8	do	none.
Jefferson County Institute, ...	4	5	5	4	8	do	none.
Johnstown Academy, ...	2	2	2	3	7	do	none.
Jordan Academy, ...	3	3	3	3	8	do	none.
Keeseville Academy, ...	2	4	4	4	8	once in 15 days.	none.
Kinderhook Academy, ...	5	5	5	2	8	once in 14 days.	none.
Kingsboro' Academy, ...	1	3	1	3	11	once in 28 days.	none.
Kingston Academy, ...	4	8	6	3	6	once in 14 days.	none.
Lansingburgh Academy, ...	2	3	2	4	8	do	1
Le Roy Female Seminary, ...	3	9	6	3	10	once in 6 days.	17
Liberty Normal Institute, ...	2	4	2	2	8	once in 14 days.	none.
Lowville Academy, ...	2	4	none.	3	11	do	none.
Macedon Academy, ...	2	4	3	3	7	do	none.
Manlius Academy, ...	2	2	1	3	6	do	none.
Mayville Academy,................	3	2	2	3	7	do	none.

SCHEDULE No. 6.—(CONTINUED.)

Names of Academies.	No. of Departments.	No. of Teachers.	No. of Teachers who intend to make teaching a profession.	No. of academic terms during the year.	No. of weeks vacation in the year.	How often exercised in composition and declamation. [Females in composition only.]	No. of students instructed gratuitously.
Mexico Academy,	7	3	2	3	10	once in 14 days.	none.
Middlebury Academy,	2	4	3	3	7	do	1
Millville Academy,	2	3	3	3	8	do	none.
Monroe Academy,	2	2	0	3	7	do	none.
Montgomery Academy,	2	6	2	2	8	do	4
Moravia Institute,	2	2	2	3	10	do	none.
Mount Pleasant Academy,	3	6	4	2	8	com. o. in 7 ds, dec. o. in 14 ds	5
Munro Academy,	2	4	4	3	7	once in 14 days.	3
New Berlin Academy,	4	3	2	3	10	do	none.
Newburgh Academy,	2	8	7	2	8	com. o. in 7 ds, dec. o. in 10 ds	1
New Paltz Academy,	3	4	3	3	7	once in 14 days.	1
New-York Free Academy,	....	12	......	2	......	....	194
North Salem Academy,	3	3	2	3	8	once in 14 days.	none.
Norwich Academy,	3	3	1	3	10	do	none.
Nunda Literary Institute,	2	4	3	3	11	do	none.
Ogdensburgh Academy,	3	3	2	3	8	do	none.
Oneida Conference Seminary,	6	6	6	3	7½	do	19
Onondaga Academy,	1	3	2	3	7	do	none.

Ontario Female Seminary,	1	8	8	2	12	once in 7 days.	6
Ovid Academy,	2	2	0	3	8	once in 14 days.	none.
Owego Academy,	3	3	2	3	7	do	2
Oxford Academy,	2	4	2	3	10	do	none.
Peekskill Academy,	2	5	0	2	8	do	1
Phipps Union Seminary,	5	9	8	3	7	once in 8 days.	5
Plattsburgh Academy,	4	4	0	4	8	once in 14 days.	6
Pompey Academy,	1	1	1	3	7	do	none.
Poughkeepsie Female Academy,	4	7	7	2	8	do	none.
Prattsville Academy,	2	2	2	3	......	do	none.
Red Creek Union Academy,	4	4	1	3	8	do	4
Rensselaer Institute,	2	4	3	2	10	daily lectures.	none.
Rensselaerville Academy,	2	3	0	3	8	once in 14 days.	none.
Rhinebeck Academy,	2	2	1	3	9	do	1
Riga Academy,	3	4	2	3	7	do	none.
Rochester Collegiate Institute,	5	4	4	4	7	do	none.
Rochester Female Academy,	3	3	2	4	8	once in 10 days.	none.
Rome Academy,	3	7	4	3	8	once in 14 days, (com. o. in 2)	none.
Rutgers Female Institute,	11	25	25	4	8	once in 14 days.	15
Sag Harbor Institute,	1	1	1	4	8	once in 20 days.	not stated
St. Lawrence Academy,	3	5	4	3	8	once in 14 days.	none.
Sand Lake Academy,	3	3	2	3	7	do	3
Sauquoit Academy,	2	4	4	3	7	once in 7 days.	none.
Schenectady Lyceum and Academy,	2	9	8	3	8	once in 10 days.	10
Schoharie Academy,	3	5	5	3	7	once in 14 days.	5
Schuylerville Academy,	2	2	2	3	7	do	none.
Seneca Falls Academy,	2	2	2	4	7	do	none.
Seward Female Seminary,	1	3	3	3	10	once in 7 days.	5

SCHEDULE No. 6.—(CONTINUED.)

Names of Academies.	No. of Departments.	No. of Teachers.	No. of Teachers who intend to make teaching a profession.	No. of academic terms during the year.	No. of weeks vacation in the year.	How often exercised in composition and declamation. [Females in composition only.]	No. of students instructed gratuitously.
Sherburne Union Academy,	1	1	0	3	10	once in 14 days.	none.
Spencertown Academy,	2	1	0	4	8	once in 7 days.	none.
Springville Academy,	2	2	2	3	7	once in 21 days.	none.
S. S. Seward Institute,	2	4	3	2	8	comp. on. in 14, dec. on. in 10	1
Starkey Seminary,	3	5	4	3	6	comp. on. in 14, dec. on. in 21.	27
Stillwater Seminary,	3	3	3	3	10	once in 14 days.	none.
Troy Academy,	2	2	1	2	8	do	none.
Troy Female Seminary,	2	24	18	2	8	once in 7 days.	10
Union Hall Academy,	3	6	4	2	8	once in 14 days.	none.
Union Literary Society,	2	2	2	3	10	do	6
Union Village Academy,	2	4	4	3	7	do	none.
Utica Academy,	3	2	2	3	8	do	none.
Utica Female Academy,	5	10	10	2	8	once in 8 days.	9
Vernon Academy,	2	2	1	4	8	once in 14 days.	1
Wallkill Academy,	4	5	2	4	8	once in 21 days.	none.
Walworth Academy,	1	2	not stated	3	7	once in 14 days.	2
Washington Academy,	2	2	2	3	7	do	none.
Westfield Academy,	3	6	2	3	7	do	none.
Whitehall Academy,	2	2	2	3	7	do	none.

Whitesboro Academy,.............	2	3	not stated	3	6	once in 7 days.	not stated
Whitestown Seminary,.............	2	4	3	3	10	once in 21 days.	none.
Wilson Collegiate Institute, ...	1	3	3	3	7	once in 14 days.	none.
Windsor Academy, ...	2	3	0	3	10	do	none.
Yates Academy,..................	1	3	3	3	7	do	none.
		695	504				455

SCHEDULE No. 7.

Containing abstracts from the Academic reports for 1849, *exhibiting a statement of the various prices charged for tuition in the several Academies, on the leading branches of study taught in said Academies; and also a statement of the average price of board in each Academy and vicinity; and also the number of volumes in each Academic library.*

NAMES OF ACADEMIES.	Common English studies per term or quarter.	Mathematical and higher English studies per term or quarter.	Classical studies, including all the preceding, per term or quarter.	Average price of board per week.	No. of vols. in the academic library.	Nat. His. of N.Y. in the library.
Academy at Little Falls,	$3 50	$4 50	$5 50	$2 00	384	
Addison Academy,	3 50	4 00	5 00	1 50	166	
Albany Academy,	5 00	8 00	10 00	2 75	797	*
Albany Female Academy,	5 00	8 00	10 00	3 00	1,066	*
Albany Female Seminary,	7 00	9 50	12 00	2 50	707	*
Albion Academy,	4 00	5 00	5 00	1 50	358	*
Alfred Academy,	3 50	4 25	5 00	1 25	451	*
Amenia Seminary,	4 00	5 50	7 00	2 00	1,837	*
Ames Academy,	3 00	4 00	5 00	1 25	270	
Amsterdam Female Seminary,	4 00	6 00	7 00	1 50	397	*
Argyle Academy,	3 25	4 25	5 25	1 50	126	*
Auburn Academy,	3 50	5 50	5 50	2 00	181	*
Auburn Female Seminary,	5 00	7 00	9 00	2 00	112	*
Augusta Academy,	3 00	4 00	5 00	1 75	153	*
Aurora Academy,	3 00	4 00	5 00	1 25	615	
Ball Seminary,	3 50	5 00	6 50	1 75	130	*
Binghamton Academy,	4 00	5 00	6 00	1 50	587	*

Brockport Collegiate Institute,	4 00	5 00	6 00	1 75	185	*
Brookfield Academy,	3 25	4 25	5 00	1 25	141	
Brooklyn Female Academy,	5 00	10 00	15 00	4 00	1,660	*
Cambridge Washington Academy,	3 00	5 00	5 00	1 75	306	*
Canandaigua Academy,	2 50	4 00	5 00	1 62	528	*
Canajoharie Academy,	3 00	5 00	5 00	1 50	189	*
Canton Academy,	3 25	3 75	3 75	1 25	125	
Cary Collegiate Seminary,	4 00	5 00	6 00	1 37	307	
Cayuga Academy,	3 00	4 00	5 00	1 50	322	*
Champlain Academy,	3 00	4 00	4 50	1 50	237	
Cherry Valley Academy,	3 00	4 00	5 00	1 75	129	
Chester Academy,	6 00	8 00	12 00	1 75	170	*
Claverack Academy,	3 00	4 00	5 00	1 50	346	
Clinton Academy,	3 00	4 00	5 00	1 75	345	*
Clinton Grammar School,	4 00	5 00	6 00	1 75	340	
Clinton Liberal Institute,	4 50	6 50	7 50	2 00	1,177	
Clover-street Seminary,	2 50	4 00	5 00	2 00	325	
Cortland Academy,	3 75	5 00	5 00	1 75	1,086	*
Cortlandville Academy,	2 50	3 75	5 00	1 50	474	*
Coxsackie Academy,	3 00	4 50	6 50	1 75	313	
Delaware Academy,	3 50	4 00	5 00	1 62	771	*
Delaware Literary Institute,	3 75	4 50	5 50	1 18	685	
De Ruyter Institute,	3 00	4 00	5 00	1 37	242	*
Dutchess County Academy,	4 50	7 00	8 00	2 75	276	
East Bloomfield Academy,	3 00	4 00	5 00	1 50	361	*
Elmira Academy,	3 00	4 00	5 00	1 87	348	*
Erasmus Hall Academy,	4 00	5 00	7 00	2 50	2,065	*
Fairfield Academy,	3 00	4 00	5 00	1 25	401	*

SCHEDULE No. 7.—(CONTINUED.)

NAMES OF ACADEMIES.	Common English studies per term or quarter.	Mathematical and higher English studies per term or quarter.	Classical studies, including all the preceding, per term or quarter.	Average price of board per week.	No. of vols. in the academic library.	Nat. His. of N. Y. in the library.
Falley Seminary,	$3 50	$5 00	$6 00	$1 75	202	*
Farmer's Hall Academy,	3 00	4 00	6 00	2 00	379	*
Fayetteville Academy,	3 00	4 00	5 00	1 50	225	
Fort Covington Academy,	4 00	5 00	5 00	1 50	100	*
Franklin Academy, (Malone)	4 00	5 00	6 00	1 25	173	*
Franklin Academy, (Prattsburgh)	4 00	4 50	5 00	1 50	1,182	
Fredonia Academy,	4 00	4 00	4 00	1 50	1,471	*
Friendship Academy,	3 00	4 00	5 00	1 25	117	*
Galway Academy,	3 00	4 00	7 00	1 75	90	*
Genesee Wesleyan Seminary,	5 35	6 70	6 70	1 75	1,677	*
Genesee & Wyoming Seminary,	4 00	5 00	6 00	1 25	412	
Geneseo Academy,	30 cts. per w'k	40 cts. per w'k	50 cts. per w'k	1 50	777	
Genoa Academy,	3 00	4 00	5 00	1 50	133	*
Gilbertsville Academy, and C. I.,	3 75	4 50	5 50	1 25	320	*
Glens Falls Academy,	4 00	5 50	7 00	1 50	258	
Gouverneur Wesleyan Seminary,	3 00	5 00	5 00	1 75	376	
Grammar School of Columbia College,	6 00	10 00	12 50	very various.	862	
Grammar School Univ. C. of New-York,	....	10 50	15 50	do	none.	
Granville Academy,	4 00	5 34	5 34	1 50	217	*
Greenbush & Schodack Academy,	3 00	5 00	6 00	2 00	82	
Greenville Academy,	3 00	4 00	5 00	1 50	165	*

Groton Academy,	1 50	4 00	5 00	1 50	298	
Hamilton Academy,	3 00	6 00	6 00	1 50	805	*
Hartwick Seminary,	3 00	4 00	6 00	1 25	854	*
Hobart Hall Institute,	4 25	5 25	5 25	1 25	588	*
Hubbardsville Academy,	3 25	4 25	5 00	1 00	97	
Hudson Academy,	3 50	5 00	7 00	2 00	151	*
Ithaca Academy,	2 00	4 00	6 00	1 75	444	*
Jamestown Academy,	4 00	4 00	4 00	1 37	256	
Jefferson Academy,	2 00	3 50	4 00	1 25	197	
Jefferson County Institute,	2 00	3 75	5 00	1 75	972	*
Johnstown Academy,	3 00	5 00	6 00	1 50	187	*
Jordan Academy,	2 00	2 50	4 37	1 37	203	*
Keeseville Academy,	3 00	4 00	5 00	2 00	218	
Kinderhook Academy,	2 00	4 00	6 25	2 00	540	*
Kingsboro' Academy,	3 25	4 50	5 25	1 50	154	*
Kingston Academy,	2 25	4 00	5 00	1 75	534	*
Lansingburgh Academy,	2 75	3 50	3 50	2 00	441	*
Le Roy Female Seminary,	4 00	6 00	7 00	1 62	581	*
Liberty Normal Institute,	3 00	6 00	6 00	1 75	129	*
Lowville Academy,	4 00	4 50	5 00	1 50	328	*
Macedon Academy,	4 50	6 00	6 75	1 50	129	
Manlius Academy,	4 00	5 00	5 00	1 75	364	*
Mayville Academy,	4 00	4 00	4 00	1 25	171	
Mexico Academy,	3 00	5 00	6 00	1 62	480	
Middlebury Academy,	4 00	4 00	5 00	1 50	736	*
Millville Academy,	3 50	5 00	6 00	1 25	193	
Monroe Academy,	4 00	5 00	5 00	1 25	144	
Montgomery Academy,	2 50	4 00	5 00	1 75	398	*

SCHEDULE No. 7.—(CONTINUED.)

NAMES OF ACADEMIES.	Common English studies per term or quarter.	Mathematical and higher English studies per term or quarter.	Classical studies, including all the preceding, per term or quarter.	Average price of board per week.	No. of vols. in the academic library.	Nat. His. of N.Y. in the library.
Moravia Institute,	$3 75	$5 00	$5 00	$1 37	425	*
Mount Pleasant Academy,	....	10 00	10 00	2 50	1,320	
Munro Academy,	3 00	3 00	4 00	1 50	314	
New Berlin Academy,	3 00	4 00	5 00	1 50	201	*
Newburgh Academy,	3 00	6 00	7 00	2 50	414	*
New Paltz Academy,	3 00	4 00	4 00	2 00	237	*
New-York Free Academy,	....	....	....	....	not stated.	
North Salem Academy,	2 50	4 00	5 50	1 75	253	
Norwich Academy,	3 75	4 50	5 50	1 25	558	*
Nunda Literary Institute,	3 00	4 00	5 00	1 50	191	*
Ogdensburgh Academy,	3 00	4 00	4 50	2 00	312	*
Oneida Conference Seminary,	4 00	7 00	7 00	1 75	1,381	*
Onondaga Academy,	3 75	5 00	5 00	1 50	504	*
Ontario Female Seminary,	12 00	12 00	10 00?	2 00	559	*
Ovid Academy,	2 50	4 00	5 00	1 75	428	
Owego Academy,	3 50	4 50	5 00	1 75	219	*
Oxford Academy,	3 75	5 50	6 50	1 50	1,219	*
Peekskill Academy,	4 00	5 00	6 00	2 25	283	*
Phipps Union Seminary,	$2 to 6 00	$2 to 6 00	$2 to 6 00	1 25	383	
Plattsburgh Academy,	3 00	4 00	4 00	1 75	146	*
Pompey Academy,	2 50	4 00	5 00	1 37	351	*

Poughkeepsie Female Academy,	$12 00	12 00	12 00	2 50	213	
Prattsville Academy,	3 00	4 00	5 00	1 75	201	
Red Creek Union Academy,	2 00	5 00	6 00	1 25	188	
Rensselaer Institute,		20 00		2 75	407	*
Rensselaerville Academy,	3 00	4 00	5 00	1 75	197	*
Rhinebeck Academy,	4 00	5 50	7 00	2 25	386	*
Riga Academy,	4 00	5 00	6 00	1 50	141	
Rochester Collegiate Institute,	4 00	5 00	6 00	2 00	284	*
Rochester Female Academy,	3 00	6 00	7 00	2 00	170	*
Rome Academy,	5 00	6 00	8 00	1 75	133	*
Rutgers Female Institute,	4 00	10 00	12 00	3 00	2,303	*
Sag Harbour Institute,	4 00	5 00	6 00	2 25	95	
St. Lawrence Academy,	3 00	5 00	5 00	1 50	649	
Sand Lake Academy,	5 33	6 66	8 00	2 00	242	*
Sauquoit Academy,	4 00	4 00	6 00	1 50	83	
Schenectady Lyceum and Academy,	3 00	5 00	5 50	1 75	325	*
Schoharie Academy,	3 00	4 00	5 00	1 50	219	
Schuylerville Academy,	4 00	5 50	6 00	1 75	160	
Seneca Falls Academy,	2 50	3 50	4 50	1 75	245	*
Seward Female Seminary,	4 00	6 00	8 00	2 00	358	*
Sherburne Union Academy,	2 00	2 50	2 50	1 25	514	*
Spencertown Academy,	3 00	4 00	5 00	1 75	203	*
Springville Academy,	4 00	5 00	5 75	1 50	127	*
S. S. Seward Institute,	3 00	5 00	7 50	2 00	82	*
Starkey Seminary,	3 00	3 50	4 00	1 50	860	
Stillwater Seminary,	3 50	4 00	6 00	1 75	304	*
Troy Academy,	6 00	9 00	9 00	2 50	338	*
Troy Female Seminary,	10 00	14 00	14 00	3 50	909	*

SCHEDULE No. 7.—(CONTINUED.)

NAMES OF ACADEMIES.	Common English studies per term or quarter.	Mathematical and higher English studies per term or quarter.	Classial studies including all the preceding, per term or quarter.	Average price of board per week.	No. of vols. in the academic library.	Nat. His. of N. Y. in the library.
Union Hall Academy,	$6 00	$10 00	$14 00	$2 50	464	●
Union Literary Society,	3 00	4 00	4 50	1 25	132	
Union Village Academy,	3 00	4 00	5 00	1 75	432	●
Utica Academy,	5 00	7 00	8 00	2 00	185	
Utica Female Academy,	4 00	7 00	10 25	3 00	76	
Vernon Academy,	2 00	3 00	4 00	1 75	374	●
Wallkill Academy,	4 00	5 00	6 00	2 00	318	●
Walworth Academy,	4 00	5 00	6 00	1 50	114	●
Washington Academy,	3 00	4 00	5 00	1 75	359	●
Westfield Academy,	2 50	4 00	4 00	1 50	424	●
Whitehall Academy,	3 50	4 25	5 00	2 00	180	
Whitesboro' Academy,	not stated.	not stated.	not stated.	1 75	153	
Whitestown Seminary,	4 00	5 00	6 00	1 25	821	
Wilson Collegiate Institute,	4 00	5 50	6 00	1 50	671	●
Windsor Academy,	3 00	4 00	5 00	1 38	181	●
Yates Academy,	4 00	4 50	6 00	1 38	329	

SCHEDULE No. 8.

Containing abstracts from the Academic Reports for 1849, *made to the Regents of the University, exhibiting the different subjects of study taught during that year, in the several Academies from which such reports were received.*

SUBJECTS OF STUDY.	ACADEMIES IN WHICH THE SUBJECTS ARE STUDIED.	No. of Academies in which the various studies are taught.
1. *Ordinary Elementary Studies.*		
Arithmetic,	In all,	157
Book-keeping,	In all male academies, except Addison, Augusta, Cayuga, Clinton G. S., Cortlandville, Fayetteville, Genesee and W., Ithaca, Mayville, New-Berlin, Ovid, Plattsburgh, Prattsville, Sherburne, S. S. Seward, Whitehall, (16,) and in Phipps Union S., Seward F. S , Utica F. Academy, (3,)	132
Composition,	In all, on an average as often as once in 14 days,	157
Declamation,	In all male academies, on an average as often as once in 14 days.	145
English Grammar,	In all,	157
Geography,	In all, except Grammar School Univ. City of New-York, Groton, Kinderhook, Ovid, Phipps, (5,)	152
Orthography,	In all.	157
Penmanship,	In all,	157
Pronunciation (English,)	In all,	157
Reading,	In all,	157
	N. B. In Rensselaer Institute no elementary studies, languages, Moral or Intellectual science. Bethany, the Deaf and Dumb Institution, and the New-York Free Academy give no list of studies.	

SCHEDULE No. 8.—(CONTINUED.)

SUBJECTS OF STUDY.	ACADEMIES IN WHICH THE SUBJECTS ARE STUDIED.	No. of Academies in which the various studies are taught.
2. *Mathematics and Natural Philosophy and their applications.*		
Algebra,	In all,	157
Astronomy,	In all, except Claverack, Erasmus Hall, Fairfield, G. S. U. C. N., Greenbush, Hubbardsville, Johnstown, Lansingburgh. Le Roy, Monroe, Newburgh, Ogdensburgh, Phipps, Troy, (14,)	143
Calculus,	Albany, Fredonia, Rutger's F. I.,	3
Calculus Integral,	Alfred, Cortland, Farmers' Hall, Genesee Wesleyan, Oxford, Rensselaer I., St. Lawrence,	7
Calculus Differential,	Alfred, Cortland, Farmers' Hall, Genesee Wesleyan, Oxford, Rensselaer I., St. Lawrence,	7
Conic Sections,	Albany, Alfred, Cortland, Delaware L. I., Fredonia, Gouverneur, Hudson, North Salem, Oxford, Seneca Falls, Springville, Union Hall,	12
Electricity,	Little Falls, Addison, Albany F. S., Alfred, Amenia, Auburn, Auburn F. S., Canandaigua, Cary, Cherry Valley, Cortland, Delaware, East Bloomfield, Falley, Farmers' Hall, Genesee Wesleyan, Gouverneur, Moravia, North Salem, Owego, Oxford, Plattsburgh, Rhinebeck, Riga, Rochester C. I., Schuylerville, Springville, Starkey, Troy F. S., Union Village, Utica, Whitestown,	32

Engineering, (Civil,).........	Albany, Alfred, Canandaigua, Gouverneur, Jefferson C. I., Oxford, Pompey, Rhinebeck, St. Lawrence,....................................	9
Geometry, (Plane,)...........	In all, except Binghamton, Cayuga, Clinton, Dutchess, Friendship, Greenbush, Millville, New-Paltz, S. S. Seward, Washington, (10,)................	147
Geometry, (Analytical,)......	Albany, Alfred, Chester, Clinton L. I., Cortland, Genesee Wesleyan, Gilbertsville, Gouverneur, Groton, Johnstown, Onondaga, Oxford, Red Creek, Rensselaer I., St. Lawrence, Seneca Falls, Springville, Wallkill, Windsor,....	19
Geometry, (Descriptive,)	Albany, Alfred, Cortland, Gouverneur, Oxford, St. Lawrence,............	6
Hydrostatics, &c.,...........	Little Falls, Addison, Albany F. S., Alfred, Amenia, Auburn F. S., Canandaigua, Cary, Cortland, Delaware, East Bloomfield, Falley, Genesee Wesleyan, Gouverneur, Hamilton, Moravia, North Salem, Oxford, Plattsburgh, Rhinebeck, Riga, Rochester C. I., Springville, Starkey, Troy F. S., Union Village, Whitestown,..	27
Levelling, ...	Amenia, Canandaigua, Cortland, Erasmus Hall, Franklin, (M.,) Gouverneur, Moravia, North Salem, Oxford, Plattsburgh, Pompey, Rhinebeck, Rochester C. I., Springville, Union Village, Whitestown, ...	16
Logarithms, ...	Alfred, Amenia, Canandaigua, Canajoharie, Cary, Cortland, Delaware, Erasmus Hall, Falley, Gouverneur, Grammar School Columbia C., Hamilton, Kinderhook, Moravia, Mount Pleasant, North Salem, Oxford, Plattsburgh, Pompey, Rhinebeck, Rochester C. I., St. Lawrence, Schuylerville, Springville, Starkey, Union Village, Wallkill,............................	27
Magnetism, ...	Little Falls, Addison, Albany F. S., Alfred, Amenia, Auburn F. S., Canandaigua, Cary, Cortland, Delaware, Fairfield, Farmers' Hall, Genesee Wesleyan, Gouverneur, Hamilton, Moravia, North Salem, Oxford, Plattsburgh, Rhinebeck, Riga, Rochester C. I., Springville, Starkey, Troy F. S., Union Village, Whitestown,..	28

SCHEDULE No. 8.—(CONTINUED.)

SUBJECTS OF STUDY.	ACADEMIES IN WHICH THE SUBJECTS ARE STUDIED.	No of Academies in which the various studies are taught.
Mechanics, ...	Little Falls, Albany F. S., Alfred, Amenia, Auburn F. S., Canandaigua, Cary, Cortland, Delaware, Fairfield, Falley, Farmers' Hall, Gouverneur, Middlebury, Moravia, North Salem, Oxford, Rensselaer I., Rhinebeck, Riga, Rochester C. I., Schuylerville, Springville, Starkey, Troy F. S., Whitestown, ...	26
Mensuration, ...	Little Falls, Albany, Albany F. S., Alfred, Amenia, Binghamton, Brockport, Brooklyn, Canandaigua, Cary, Claverack, Cortland, Delaware, Delaware L. I., Fairfield, Farmers' Hall, Franklin, (M.,) Genesee Wesleyan, Gouverneur, G. S. U. C. N., Jordan, Middlebury, New-Berlin, New-Paltz, North Salem, Oneida C., Onondaga, Ontario F. S., Owego, Oxford, Peekskill, Pompey, Rhinebeck, Rochester C. I., St. Lawrence, Sandlake, Seneca Falls, Sherburne, Springville, Union Hall, Union Village, Wallkill, Whitestown,...	43
Natural Philosophy, ...	In all, except Dutchess, Fairfield, Granville, Jefferson, Seward F. S., Whitesboro', (6,)	151
Navigation, ...	Amenia, Ball, Delaware L. I., Franklin, (M.,) Fredonia, Genesee Wesleyan, G. S. U. C. N., Jordan, Moravia, New-Berlin, Onondaga, Oxford, Peekskill, Pompey, St. Lawrence, Springville, Whitestown, ...	17
Optics, ...	Little Falls, Albany F. S., Amenia, Auburn F. S., Canandaigua, Cary, Cortland, Delaware, Fairfield, Falley, Farmers' Hall, Genesee Wesleyan, Gouverneur, Hamilton, Moravia, North Salem, Oxford, Plattsburgh, Rhinebeck, Riga, Rochester C. I., Springville, Starkey, Troy F. S., Union Village,...	25

Perspective,................	Genesee Wesleyan, Gouverneur, New-Paltz, Oxford, Rensselaer I., St. Lawrence, Springville,..	7
Surveying,.................	In all male Academies, except Addison, Augusta, Chester, Clinton, Clinton L. I., Coxsackie, Elmira, Falley, Fort Covington, Friendship, Geneseo, Gilbertsville G. S., Columbia C., G. S. U. C. N., Greenbush, Greenville, Hubbardsville, Johnstown, Keeseville, Millville, Monroe, Mount Pleasant, Munro, Ogdensburgh, Oneida C., Prattsville, Riga, Sag Harbour, Sandlake, Schenectady, Spencertown, S. S. Seward, Starkey, Stillwater, Troy, Vernon, Wallkill, Walworth, Washington, Whitestown, Windsor, (41,) (Railway, Surveying, Topography, Hydrography, Rensselaer Institute)...........	117
Technology,...............	Albany, Canajoharie, Oxford, Phipps, Poughkeepsie F., Rochester C. I., Rochester F. A., Utica F. A.,....................................	8
Trigonometry,..............	Little Falls, Addison, Albany, Albany F. A., Albany F. S., Albion, Alfred, Argyle, Ball, Brockport, Brooklyn, Cambridge, Canandaigua, Canton, Cary, Cayuga, Claverack, Clinton G. S., Clover Street, Cortland, Coxsackie, Delaware, Delaware L. I., De Ruyter, East Bloomfield, Erasmus Hall, Fairfield, Falley, Farmers' Hall, Franklin, (M.,) Franklin, (P.,) Genesee and W., Genesee Wesleyan, Genoa, Glens Falls, Gouverneur, Grammar S. Columbia C., G. S. U. C. N., Groton, Hamilton, Ithaca, Jordan, Kinderhook, Lansingburgh, Le Roy, Liberty, Lowville, Macedon, Manlius, Mexico, Middlebury, Montgomery, Moravia, New-Berlin, Newburgh, North Salem, Norwich, Nunda, Oneida C., Ontario F. S., Owego, Oxford, Peekskill, Plattsburgh, Pompey, Poughkeepsie F., Red Creek, Rensselaer I., Rensselaerville, Rhinebeck, Rochester C. I., Rutgers F. I., St. Lawrence, Sandlake, Sauquoit, Schenectady, Seneca Falls, Sherburne, Springville, Union Hall, Union Village, Utica F. A., Wallkill, Westfield,..........	84

SCHEDULE NO. 8.—(Continued.)

SUBJECTS OF STUDY.	ACADEMIES IN WHICH THE SUBJECTS ARE STUDIED.	No. of Academies in which the various subjects are taught.
3. *Ancient Languages.*		
Greek Language,…………	In all male Academies, except Addison, Aurora, Fayetteville, Friendship, Mayville, Millville, New-Paltz, Vernon, Wallkill, (9,) and in Albany F. S., Troy F. S.,………	140
Grecian Antiquities,……….	Albany F. S., Amenia, Clinton L. I., Delaware, Fairfield, Falley, Farmers' Hall, Franklin, (P.,) Fredonia, Genesee Wesleyan, Gouverneur, Hamilton, Moravia, Oxford, St. Lawrence, Schuylerville, Utica, ………	17
Hebrew Language, ……….	Alfred, Genesee Wesleyan, Gouverneur, Hartwick,………	4
Latin Language,………….	In all male Academies, except New-Paltz, S. S. Seward, (2,) and in Albany Female S., Auburn F. S., Brooklyn F. A., Le Roy F. S., Ontario F. S., Poughkeepsie F. A., Rochester F. A., Rutgers F. A., Seward F. S., Troy F. S., (10,)………	153
Roman Antiquities, ……….	Albany Female S., Canajoharie, Claverack, Clinton L. I., Delaware, Fairfield, Falley, Farmers' Hall, Genesee Wesleyan, Gouverneur, North Salem, Oxford, Phipps, Poughkeepsie, St. Lawrence, Utica, ………	16
Mythology, …………….	Albany Female S., Brooklyn F. A., Farmers' Hall, Gouverneur, Newburgh, St. Lawrence, Schuylerville, S S. Seward, Westfield,………	9
4. *Modern Languages.*		
French Language, ……….	In all, except Amsterdam, Auburn, Augusta, Cambridge, Chester, Claverack, Clinton, Galway, Granville, Greenbush, Greenville, Hubbardsville, Jeffer-	

	son, Johnstown, Kingsboro, Lowville, Poughkeepsie, Sauquoit, Union L. S., Utica, Whitehall, Whitesboro', Windsor, (23,)	134
German Language, ...	Little Falls, Albion, Amenia, Brockport, Brooklyn, Cary, Clinton G. S., Clinton L. I., Cortland, De Ruyter, Falley, Genesee and W., Genesee Wesleyan, Gouverneur, Hartwick, Macedon, Mexico, New-Berlin, Oneida C., Oxford, Red Creek, Rochester C. I., Seward F. S., Troy F. S., Yates,	25
Italian Language, ...	Alfred, Brooklyn, Canajoharie, Delaware, De Ruyter, Gouverneur, Manlius, Mayville, Oxford, S. S. Seward, Yates, ...	11
Spanish Language, ...	Albany Female S., Clinton L. I., Falley, Gouverneur, G. S. U. C. N., Jefferson, Oxford, Rochester F. A., St. Lawrence, Troy F. S., Yates, ...	11
5. *Natural Sciences.*		
Anatomy, ...	Little Falls, Addison, Albany F. S., Albion, Alfred, Amenia, Amsterdam, Auburn F. S., Aurora, Brookfield, Canandaigua, Canton, Cary, Cayuga, Cherry Valley, Clinton L. I., Cortland, East Bloomfield, Elmira, Fairfield, Falley, Farmers' Hall, Franklin, (M.,) Genesee Wesleyan, Gouverneur, Hubbardsville, Johnstown, Manlius, Mexico, Millville, Oneida C., Ontario F., Owego, Oxford, Plattsburgh, Red Creek, Rhinebeck, Riga, St. Lawrence, Schuylerville, Springville, S. S. Seward, Starkey, Troy F. S., Union Hall, Wallkill, Whitehall, Whitestown, Wilson, ...	49
Botany, ...	In all, except Addison, Albany Fem. Acad., Albion, Auburn, Augusta, Ball, Canandaigua, Cayuga, Cherry Valley, Claverack, Clinton, Dutchess, Fayetteville, Fort Covington, Friendship, Galway, Gilbertsville G. S., Columbia C., G. S. U. C. N., Granville, Groton, Hartwick, Hubbardsville, Hudson, Jefferson, Johnstown, Liberty, Mayville, Millville, Monroe, Mount Pleasant, Newburgh, Nunda, Ogdensburgh, Onondaga, Ovid, Peekskill, Prattsville, Riga, Rutgers F. I., Spencertown, Stillwater, Troy, Utica, Vernon, Wallkill, Walworth, Washington, Whitehall, (49,)	108

SCHEDULE NO. 8—(CONTINUED.)

SUBJECTS OF STUDY.	ACADEMIES IN WHICH THE SUBJECTS ARE STUDIED.	No. of Academies in which the various subjects are taught.
Chemistry,	In all, except Dutchess, Erasmus Hall, Friendship, G. S. U. C. N., Hubbardsville, Liberty, Moravia, Mount Pleasant, Munro, Ovid, Sag Harbour, Seward F. S., Troy, Utica, Washington, Whitesboro', (16,)	141
Chemistry, (Agricultural,)	Little Falls, Augusta, Cortland, De Ruyter, East Bloomfield, Genesee Wesleyan, Middlebury,	7
Geology,	Little Falls, Albion, Alfred, Amenia, Binghamton, Brooklyn, Canandaigua, Canajoharie, Canton, Clinton G. S., Clinton L. I., Clover Street, Cortland, Cortlandville, Delaware, Delaware L. I., De Ruyter, East Bloomfield, Elmira, Falley, Franklin, (M.,) Franklin, (P.,) Fredonia, Genesee and W., Genesee Wesleyan, Genoa, Gilbertsville, Gouverneur, Ithaca, Jamestown, Jordan, Lansingburgh, Lowville, Mexico, Millville, Munro, New-Berlin, North Salem, Oneida C., Ontario F., Owego, Oxford, Plattsburgh, Rensselaer I, Riga, Rochester C. I., St. Lawrence, Sandlake, Schuylerville, Seneca Falls, Spencertown, Springville, Starkey, Utica F. A., Westfield, Whitesboro', Whitestown, Wilson, Yates,	59
Hygiene,	Gouverneur, Oneida C., St. Lawrence,	3
Meteorology,	East Bloomfield, Onondaga,	2
Mineralogy,	Amenia, Binghamton, Brooklyn, Canandaigua, Canajoharie, Franklin, (M.,) Franklin, (P.,) Fredonia, Genesee and W., Genesee Wesleyan, Gouverneur, New-Berlin, North Salem, Oxford, Rensselaer I., Rochester C I., St. Lawrence, Schenectady, Seneca Falls,	19

Natural History, ...	Albany, Albany F. S., Amenia, Amsterdam, Auburn F. S., Brooklyn, Cambridge, Cary, Cherry Valley, Clinton G. S., Cortland, Cortlandville, Coxsackie, East Bloomfield, Erasmus Hall, Falley, Farmers' Hall, Franklin, (M.,) Geneseo, Jamestown, Jefferson C. I., Keeseville, Kinderhook, Kingsboro, Le Roy, Middlebury, Moravia, Munro, New-Paltz, Oneida C., Onondaga, Ontario F., Ovid, Oxford, Poughkeepsie, Rochester C. I., Rutgers F. I., St. Lawrence, Schenectady, Schuylerville, Union Hall, Wallkill,...	41
Physiology, ...	Little Falls, Addison, Albany, Albany F. A., Albany F. S., Albion, Alfred, Amenia, Ames, Amsterdam, Argyle, Auburn, Auburn F. S., Augusta, Aurora, Binghamton, Brockport, Brookfield, Brooklyn, Cambridge, Canandaigua, Canajoharie, Canton, Cary, Cherry Valley, Clinton, Clinton G. S., Clinton L. I, Clover Street, Cortland, Cortlandville, Coxsackie, Delaware, Delaware L. I., De Ruyter, East Bloomfield, Elmira, Erasmus Hall, Fairfield, Falley, Farmers' Hall, Franklin, (M.,) Franklin, (P.,) Friendship, Galway, Genesee and W., Genesee Wesleyan, Geneseo, Gouverneur, G. S., Columbia C., Hamilton, Hobart Hall, Ithaca, Jamestown, Jefferson C. I., Jordan, Keeseville, Kingston, Lowville, Macedon, Manlius, Middlebury, Millville, Montgomery, Moravia, Munro, New-Berlin, Norwich, Ogdensburgh, Oneida C. Onondaga, Owego, Oxford, Phipps, Plattsburgh, Poughkeepsie, Red Creek, Rensselaer I., Rhinebeck, Riga, Rochester C. I., Rutgers F. I., St. Lawrence, Schenectady, Schoharie, Seward F. S., Spencertown, Springville, S. S. Seward, Starkey, Troy, Troy F. S., Union Hall, Union L. S., Utica F. A., Wallkill, Walworth, Washington, Westfield, Whitehall, Whitestown, Wilson, Yates,..........................	102

SCHEDULE No. 8.—(CONTINUED.)

SUBJECTS OF STUDY.	ACADEMIES IN WHICH THE SUBJECTS ARE STUDIED.	No. of Academies in which the various studies are taught.
6. *Moral, Intellectual, and Political Science.*		
Criticism, (Elements of,)	Albany, Albany F. A., Albany F. S., Alfred, Auburn F. S., Brockport, Brooklyn, Canajoharie, Clinton G. S., Clinton L. I., Clover Street, East Bloomfield, Farmers' Hall, Franklin, (P.,) Fredonia, Genesee Wesleyan, Geneseo, Glens Falls, Hamilton, Ithaca, Le Roy, Middlebury, Norwich, Oneida C., Ontario F., Ovid, Oxford, Phipps, Poughkeepsie, Rhinebeck, Rutgers F. I., Springville, Starkey, Troy F. S., Union Hall, Utica F. A.,	36
Christianity, (Evidences of,)...	Albany, Albany Female Acad., Albany F. S., Amenia, Brockport, Brooklyn, Cary, Clinton G. S., Clinton L. I., Genesee Wesleyan, Geneseo, Hartwick, Lansingburgh, Le Roy, Ontario F., Oxford, Phipps, Poughkeepsie, Rochester F. A., Rutgers F. I., ...	20
History, (General,)..........	In all, except Amenia, Amsterdam, Auburn, Ball, Binghamton, Cayuga, Chester, Claverack, Clinton, De Ruyter, Falley, Fayetteville, Fort Covington, Friendship, Galway, Gilbertsville, Granville, Greenbush, Groton, Hartwick, Hudson, Jefferson, Johnstown, Jordan, Lowville, Manlius, Mayville, Middlebury, Millville, Monroe, Mount Pleasant, Newburgh, Nunda, Oneida C., Owego, Pompey, Prattsville, Red Creek, Rhinebeck, Riga, Sandlake, Schoharie, Sherburne, Starkey, Stillwater, Vernon, Walworth, Westfield, Whitestown, Yates, (50,)	107

History, (Eclesiastical,)	Galway,	1
History of the United States,	In all, except Addison, Albion, Alfred, Amsterdam, Argyle, Auburn, Augusta, Ball, Binghamton, Brockport, Brookfield, Canton, Cary, Champlain, Chester, Claverack, Clinton, Clinton L. I., Coxsackie, Delaware L. I., De Ruyter, East Bloomfield, Fairfield, Fayetteville, Fort Covington, Galway, Genesee Wesleyan, Genoa, Gilbertsville, Gouverneur, Greenbush, Groton, Hartwick, Hubbardsville, Hudson, Ithaca, Jamestown, Jefferson, Lowville, Macedon, Manlius, Mayville, Middlebury, Millville, Newburgh, Nunda, Ogdensburgh, Oneida C., Ovid, Owego, Red Creek, Rensselaerville, Rhinebeck, St. Lawrence, Sauquoit, Schoharie, Schuylerville, Seneca Falls, Sherburne, Starkey, Troy, Union S. S., Union Village, Utica, Wallkill, Walworth, Washington, Whitehall, Whitesboro', Yates, (71,)	86
Law, (Constitutional,) and Government,	Albany, Ames, Brookfield, Cary, Fredonia, Hamilton, Hubbardsville, Jamestown, Le Roy, Lowville, Ontario F., Oxford, Poughkeepsie, St. Lawrence, Seward F. S., Utica F. A., Washington, Westfield,	18
Logic,	Albany F. S. Alfred, Amenia, Aurora, Binghamton, Canandaigua, Cary, Cherry Valley, Clinton L. I., Fredonia, Genesee Wesleyan, Gouverneur, Hartwick, Jordan, Le Roy, Macedon, Middlebury, Montgomery, North Salem, Oneida C., Onondaga, Ontario F., Owego, Oxford, Phipps, Rochester C. I., Rochester F. A., Rutgers F. S., Schenectady, Seneca Falls, Springville, Utica F. A., Wallkill, Westfield, Whitesboro', Whitestown, Wilson,	37
Natural Theology,	Albany, F. S , Alfred, Amenia, Brooklyn, Canandaigua, Clinton G. S., Clinton L. I., Genesee Wesleyan, Gilbertsville, Ithaca, Le Roy, New-Paltz, Ontario, F., Oxford, Poughkeepsie, Rutgers F. I., St. Lawrence, Schenectady, S. S. Seward, Troy F. S., Utica F. A., Wallkill, Whitesboro',	23

SCHEDULE No. 8.—(Continued.)

SUBJECTS OF STUDY.	ACADEMIES IN WHICH THE SUBJECTS ARE STUDIED.	No. of Academies in which the various studies are taught.
Philosophy, (Intellectual,)	In all, except Addison, Albany, Auburn, Augusta, Aurora, Ball, Brookfield, Cayuga, Champlain, Cherry Valley, Chester, Claverack, Clinton, Clinton L. I., Coxsackie, De Ruyter, Dutchess, Fairfield, Fayetteville, Fort Covington, Friendship, Gilbertsville G. S., Columbia C., G. S. U. C. N., Granville, Greenbush, Groton, Hartwick, Hubbardsville, Hudson, Jefferson, Jordan, Keeseville, Kinderhook, Kingsboro', Kingston, Liberty, Manlius, Mayville, Millville, Moravia, Mount Pleasant, Munro, Nunda, Ogdensburgh, Ovid, Peekskill, Plattsburgh, Prattsville, Rhinebeck, Sandlake, Schoharie, Seneca Falls, Starkey, Stillwater, Troy, Union Village, Utica, Vernon, Walworth, Whitestown, Wilson, Yates, (63,).......	94
Philosophy, (Moral,).........	In all, except Addison, Albany, Alfred, Amsterdam, Auburn, Augusta, Aurora, Ball, Binghamton, Brookfield, Brockport, Cherry Valley, Claverack, Clinton, Coxsackie, Delaware L. I., De Ruyter, Dutchess, Erasmus Hall, Falley, Fayetteville, Fort Covington, Friendship, Genoa, Glens Falls, Gouverneur, Grammar School Columbia College, G. S. U. C. N., Granville, Greenville, Hartwick, Hobart Hall, Hubbardsville; Hudson, Jefferson, Johnstown, Keeseville, Kinderhook, Kingsboro,' Kingston, Lansingburgh, Liberty, Lowville, Macedon, Mayville, Millville, Monroe, Montgomery, Moravia, Mount Pleasant, Munro, New-Berlin, Nunda, Ogdensburgh, Ovid, Owego, Peekskill, Prattsville, Red Creek, Rensselaerville, Rhinebeck, Rome, Sauquoit, Schoharie, Sherburne, Spencertown, Troy, Union Hall,	

	Utica, Vernon, Walworth, Whitehall, Whitesboro', Whitestown, Wilson, Yates, (76,)	81
Political Economy,	Albany, Amenia, Ames, Aurora, Clinton L. I., Fredonia, Genesee Wesleyan, Owego, Oxford, Phipps, St. Lawrence, Seward, F. S., Utica,	13
Psychology,	St. Lawrence,	1
Rhetoric,	In all, except Addison, Albion, Alfred, Amsterdam, Auburn, Augusta, Brockport, Canton, Cayuga, Champlain, Delaware L. I., De Ruyter, Dutchess, East Bloomfield, Elmira, Fairfield, Fayetteville, Fort Covington, Friendship, Galway, Genesee and W., Genoa, Gilbertsville, Grammar School U. C. N., Greenbush, Greenville, Hartwick, Hubbardsville, Hudson, Jefferson, Johnstown, Keeseville, Liberty, Lowville, Macedon, Mayville, Millville, Moravia, Mount Pleasant, New-Berlin, Newburgh, New-Paltz, Nunda, Ogdensburgh, Ovid, Peekskill, Pompey, Sag Harbour, Sandlake, Schoharie, Starkey, Stillwater, Troy, Union Village, Utica, Vernon, Walworth, Washington, Whitehall, Whitesboro', Windsor, Yates, (62,)	95
Teaching (Principles of,)	Alfred, Canandaigua, Claverack, Delaware, East Bloomfield, Friendship, Gouverneur, Hamilton, Oxford, St. Lawrence, Westfield,	11
Phonography,	Gilbertsville, Gouverneur, Millville, Springville,	4
Phrenology,	Clinton L. I., Grammar School of Columbia College,	2
Mapping,	Mount Pleasant, Springville, Troy F. S.,	3
Drawing,	Albany, Amenia, Clinton G. S., East Bloomfield, Franklin, (P.,) Macedon, Mexico, Mount Pleasant, Newburgh, Phipps, Plattsburgh, Pompey, Rensselaer I., Rome, Rutgers F. I., Schoharie, Springville, Troy F. S., Union Hall, Wallkill,	20
Painting,	Amenia, Clinton G. S., Rutgers F. I., Schoharie, Springville, Troy F. S., Union Hall,	7
Embroidery,	Erasmus Hall, Rutgers F. I.,	2
Music,	Alfred, Phipps, Plattsburgh, Schoharie, Union Hall,	5

SCHEDULE No. 8.—(CONTINUED.)

SUBJECTS OF STUDY.	ACADEMIES IN WHICH THE SUBJECTS ARE STUDIED.	No. of Academies in which the various studies are taught.
Music, (Instrumental,)	Amenia, Clinton G. S., Erasmus Hall, Mount Pleasant, Newburgh, New-Paltz, North Salem, Troy F. S., Wallkill, ...	9
Music, (Vocal,)	Amenia, Clinton G. S., Erasmus Hall, Glens Falls, Grammar School U. C. N., Mexico, Mount Pleasant, Newburgh, Springville, Troy F. S., ...	10
Dancing, ...	Troy F. S., ...	1
Calisthenics, ...	Auburn F. S., Le Roy F. S., Rutgers F. I., ...	3
Gymnastics, ...	Newburgh, ...	1

SCHEDULE No. 9.

Containing abstracts from the Academic Reports for 1849, *made to the Regents of the University, exhibiting the various text or class books used during said year, in the Academies from which such reports were received, on the different subjects of study taught in said Academies.*

1. ORDINARY ELEMENTARY STUDIES.

SUBJECTS OF STUDY.	BOOKS USED.	No. of Academies.
Arithmetic,	Adams,	69
	Baldwin,	3
	Bazeley,	1
	Colburn,	66
	Cruttenden,	5
	Daboll,	5
	Davies,	54
	Day,	2
	De Morgan,	1
	Emerson,	29
	Greenleaf,	16
	Marsh,	1
	Parley,	1
	Perkins,	24
	Ring,	1
	Ruger,	1
	Smith,	16
	Stoddard,	1
	Thomson,	51
	Wanzer,	1
	Willet,	1
	Willson,	2
Book-keeping,	Adams,	1
	Bachelor,	1
	Bennet,	16
	Coffin,	2
	Colt,	6
	Cruttenden,	3
	Duff,	2
	Eastman,	24
	Foster,	2
	Fulton,	28
	Harris,	6

SCHEDULE No. 9.—(CONTINUED.)

SUBJECTS OF STUDY.	BOOKS USED.	No. of Academies.
Book-keeping,	Jones,	2
	Marsh,	8
	National Accountant,	1
	Northend,	1
	Preston,	66
	Winchester,	5
Composition,	Blair,	1
	Boyd,	7
	Morgan,	1
	Newman,	2
	Parker,	51
Elocution,	Bronson,	2
	Caldwell,	4
	Clagget,	3
	Comstock,	8
	Dwyer,	1
	Fowle,	1
	Frost,	3
	Howe,	1
	Kirkham,	2
	Lovell,	15
	McGuffie,	1
	Maglathlin,	7
	Mandeville,	7
	Porter,	21
	Russell,	8
	Sanders,	5
	Sweet,	16
	Town,	2
English Grammar,	Bazeley,	1
	Brown,	71
	Bullions,	45
	Clagget,	1
	Clark,	7
	Comley,	1
	Cruttenden,	1
	Frazer,	1
	Green,	2
	Greenleaf,	1
	Hazen,	4
	Horne Tooke,	1
	Kenyon,	1
	Kirkham,	22
	Miller,	1

SCHEDULE No. 9.—(CONTINUED.)

SUBJECTS OF STUDY.	BOOKS USED.	No. of Academies.
English Grammar,	Murray,	1
	Pierce,	1
	Saunders,	2
	Smith,	24
	Weld,	8
	Wells,	18
Eng. Language Dictionary,	Gallaudet,	1
	Johnson,	1
	Reid,	1
	Town,	1
	Walker,	6
	Walker and Webster,	1
	Webster,	102
	Worcester,	18
Geography,	Bazeley,	1
	Book of Commerce,	1
	Goodrich,	7
	Mitchell,	105
	Morse,	53
	Olney,	15
	Parley,	6
	Smith,	18
	Willard,	4
	Woodbridge,	6
	Woodbridge and Willard,	8
	Worcester,	1
Orthography,	Bentley,	2
	Clagget,	1
	Clark,	1
	Cobb,	7
	Fowle,	2
	Gallaudet and Hooker,	5
	Galpin,	1
	Hazen,	6
	Kenyon,	1
	Lynd,	2
	McEllegat,	7
	Mandeville,	1
	Page,	9
	Rush,	1
	Sanders,	21
	Scholar's Companion,	3
	Swan,	4
	Town,	46

SCHEDULE No. 9.—(CONTINUED.)

SUBJECTS OF STUDY.	BOOKS USED.	No. of Academies.
Orthography,	Walker,	1
	Webster,	41
	Wells,	2
	Worcester,	3
	Wright,	21
Pronunciation Standard,	Reid,	1
	Walker,	5
	Walker and Webster,	2
	Webster,	71
	Worcester,	8
Reading Books,	The Bible,	28
	American Expositor,	1
	American 1st Class Book,	4
	American Manual,	1
	Angell's Series,	5
	Book of Commerce,	1
	Bronson's Elocution,	1
	Bentley's Series,	4
	Caldwell,	1
	Campbell's Poems,	1
	Child's Guide,	1
	Clagget's Elocution,	1
	Cleveland's Eng. Literature	1
	Cobb's Series,	3
	Comstock's Elocution,	2
	Cowper,	1
	De Tocqueville,	1
	Flint's Book of History,	1
	Fowle's Bible Reader,	1
	Goodrich's History,	3
	Guernsey's History,	2
	Hale's History,	3
	Hall's Reader,	1
	Hazen's Technology,	1
	Hemans,	1
	Howe's Elocutionist,	1
	Howe's Shakspeare Reader,	2
	Knowles Rhet. Reader,	1
	Leavitt,	2
	Lovell's Series,	4
	Maglathlin,	1
	M'Guffie's Series,	1
	Mandeville,	16
	Milton,	7

SCHEDULE No. 9.—(CONTINUED.)

SUBJECTS OF STUDY.	BOOKS USED.	No. of Academies.
Reading Books,	Mount Vernon Reader,	2
	Murray's English Reader,	7
	National Preceptor,	2
	National Reader,	1
	National Speaker,	2
	North American Reader,	2
	Olney's Easy Reader,	1
	Parker's Exercises,	1
	Parley's History,	2
	Paulding's Washington,	1
	Pollock,	4
	Popular Lessons,	1
	Porter's Rhetorical Reader,	49
	Reader's Guide,	1
	Robbins' History,	3
	Russel's Reader,	4
	Russel and Golsbury,	2
	Saunders' Series,	66
	Scripture Reader,	1
	Shakespeare,	1
	Smellie,	1
	Sweet's Elocution,	7
	Thomson,	1
	Town's Reading Books,	26
	Village Reader,	4
	Willson's Am. Class Read.	4
	Worcester's Books,	8
	Young Lady's Class Book,	5
	Young Ladies' Reader,	2

2. MATHEMATICS AND NATURAL PPILOSOPHY, AND THEIR APPLICATIONS.

SUBJECTS OF STUDY.	BOOKS USED.	No. of Academies.
Algebra,	Bailey,	4
	Bonnycastle,	3
	Bourdon,	6
	Bridges,	1
	Clark,	4
	Colburn,	6
	Davies,	65
	Davies' Bourdon,	38
	Day & Thomson's Day,	100
	Hackley,	1
	Hutton,	1
	Loomis,	8

SCHEDULE No. 9.—(Continued.)

SUBJECTS OF STUDY.	BOOKS USED.	No. of Academies.
Algebra,	Perkins,	15
	Robinson,	14
	Ryan,	2
	Smith,	1
	Thomson,	1
	Tower,	4
Astronomy,	Burritt,	95
	Comstock,	4
	Day,	1
	Guy,	2
	Herschel,	2
	Keith,	6
	Kendall,	4
	Matteson,	47
	Mitchell,	1
	Norton,	2
	Olmsted,	26
	Parker,	1
	Robinson,	1
	Smith,	20
Calculus,	Davies,	3
Calculus (Integral),	Church,	1
	Davies,	5
	Pierce,	1
Calculus (Differential),	Church,	1
	Davies,	5
	Pierce,	1
Conic Sections,	Coffin,	2
	Davies,	4
	Day,	1
	Jackson,	6
	Simson,	1
Electricity,	Comstock,	10
	Day,	1
	Draper,	5
	Gray,	3
	Johnston,	4
	Olmsted,	13
	Parker,	6
	Reid & Bain,	1
	Silliman,	3
Engineering (Civil),	Davies,	1
	Gillepsie,	1
	Mahan,	7

SCHEDULE No. 9.—(CONTINUED.)

SUBJECTS OF STUDY.	BOOKS USED.	No. of Academies.
Geometry,	Davies & Davies' Legendre,	126
	Hackley,	1
	Loomis,	2
	Perkins,	2
	Thomson's Legendre,	6
	Euclid, (Playfair, &c.,)	18
	Whitlock,	2
Geometry (Analytic),	Coffin,	1
	Davies,	16
	Pierce,	1
	Young,	1
Geometry (Descriptive),	Armstrong,	1
	Davies,	5
Hydrostatics,	Comstock,	6
	Day,	1
	Draper,	1
	Enfield,	1
	Johnston,	3
	Loomis,	1
	Olmsted,	14
	Parker,	4
Levelling,	Davies,	15
	Flint,	1
	Gummere,	2
Logarithms,	Clark,	1
	Davies,	19
	Day,	1
	Flint,	1
	Gummere,	3
	Loomis,	1
	Perkins,	1
	Smith,	1
Magnetism,	Comstock,	8
	Draper,	4
	Johnston,	4
	Olmsted,	13
	Parker,	4
	Robinson,	1
	Silliman,	3
Mechanics,	Comstock,	6
	Day,	1
	Johnston,	5
	Lardner,	1
	Olmsted,	9

SCHEDULE No. 9.—(CONTINUED.)

SUBJECTS OF STUDY.	BOOKS USED.	No. of Academies.
Mechanics,	Parker,	3
	Robinson,	1
	Tredgold,	1
Mensuration,	Bonnycastle,	1
	Davies,	29
	Davies' Legendre,	5
	Day,	5
	Ostrander,	1
	Scribner,	1
	Whitlock,	1
Natural Philosophy,	Arnott,	3
	Bird,	1
	Blake,	2
	Comstock,	79
	Day,	1
	Draper,	5
	Enfield,	1
	Gray,	1
	Johnston,	3
	Olmsted,	59
	Parker,	27
	Phelps,	2
	Robinson,	5
	Swift,	9
Navigation,	Bowditch,	1
	Davies,	11
	Day,	4
Optics,	Comstock,	8
	Day,	1
	Enfield,	1
	Johnston,	3
	Olmsted,	11
	Parker,	3
	Robinson,	1
	Silliman,	1
Perspective,	Armstrong,	1
	Chapman,	1
	Coe,	1
	Davies,	2
	Whitlock,	1
Surveying,	Davies,	80
	Day,	2
	Flint,	20
	Gummere,	15

SCHEDULE No. 9.—(Continued.)

SUBJECTS OF STUDY.	BOOKS USED	No. of Academies.
Surveying,	Whitlock,	1
Technology,	Bigelow,	7
	Hazen,	1
	Potter,	2
Trigonometry,	Davies & Davies' Legendre,	72
	Day,	7
	Flint,	1
	Gummere,	3
	Pierce,	1
	Simson,	1
	Thomson,	1
	Whitlock,	1
	Young,	1

3. ANCIENT LANGUAGES.

SUBJECTS OF STUDY.	BOOKS USED	No. of Academies.
Greek Language, Grammar,	Anthon,	19
	Arnold,	4
	Bullions,	85
	Buttman,	3
	Crosby,	2
	Fisk,	4
	Goodrich,	12
	Kendrick,	7
	Kuhner,	6
	McClintock,	6
	Sophocles,	19
	Valpy,	1
Grecian Antiquities,	Anthon,	10
	Eschenberg,	1
	Cleveland,	2
	Potter,	1
	Smith,	1
Hebrew Language, Grammar,	Gesenius,	3
	Nordheimer,	1
Latin Language, Grammar,	Adam, (including the various editions,)	15
	Arnold,	4
	Anthon,	5
	Andrews & Stoddard,	85
	Bullions,	59
	Goodrich,	1
	Hall,	1
	Kuhner,	1

SCHEDULE No. 9.—(CONTINUED.)

SUBJECTS OF STUDY.	BOOKS USED.	No. of Academies.
Latin Language, Grammar,..	McClintock,............	8
	Schmitz,...............	1
	Zumpt,................	2
Roman Antiquities, ...	Adam, ...	9
	Anthon, ...	5
	Dillaway,..............	1
	Eschenberg,............	1
	Smith,.................	1
Mythology,...............	Anthon, ...	4
	Dwight, ...	1
	Keightley, ...	1
	Lempriere,.............	1
	Robbins,...............	1
	Tooke, ...	2

4 MODERN LANGUAGES.

SUBJECTS OF STUDY.	BOOKS USED.	No. of Academies.
French Language, Grammar,.	Fowle, ...	1
	Jewett,................	1
	Levizac,...............	65
	Longfellow,............	1
	Manesca,..............	5
	Noel & Chapsal, ...	6
	Ollendorf,.............	71
	Perrin, ...	3
	Pinney,................	12
	Roux,.................	1
	Sparks,................	1
	Wanostrocht,..........	1
German Language, Grammar,	Adler, ...	2
	Follen,................	2
	Ollendorf, ...	22
Italian Language, Grammar,.	Cubi, ...	1
	Foresti,................	1
	Graglia, ...	7
	Ollendorf, ...	4
	Robello,...............	1
Spanish Language, Grammar,	Cubi, ...	2
	Ollendorf, ...	8

SCHEDULE No. 9.—(CONTINUED.)

5. NATURAL SCIENCE.

SUBJECTS OF STUDY.	BOOKS USED.	No. of Academies.
Anatomy,	Cutter,	48
	Smith,	1
Botany,	Beck,	3
	Comstock,	1
	Eaton,	5
	Gray,	3
	Lincoln,	73
	Phelps,	7
	Ruschenberger,	1
	Wood,	40
	Wright,	1
Chemistry,	Beck,	4
	Comstock,	65
	Davies,	1
	Draper,	25
	Fownes,	1
	Gray,	33
	Johnston,	8
	Jones,	1
	Kane,	1
	Liebig,	1
	Phelps,	2
	Reid & Bain,	1
	Silliman,	24
	Turner,	4
Chemistry (Agricultural),	Eaton,	4
	Gray,	1
	James F. Johnston,	4
Geology,	Agassiz,	1
	Bakewell,	1
	Comstock,	7
	Hitchcock,	43
	Lee,	2
	Lyell,	2
	Mather,	1
	Page,	2
	Phelps,	1
	Ruschenberger,	5
	Smith, (J. Pye,)	1
Hygiene,	Cutter,	3
Meteorology,	Brocklesby,	2

SCHEDULE No. 9.—(Continued.)

SUBJECTS OF STUDY.	BOOKS USED.	No. of Academies.
Mineralogy,	Cleveland,	1
	Comstock,	10
	Dana,	5
	Hitchcock,	1
	Lee,	1
Natural History,	Ackerman,	9
	Bigland,	1
	Comstock,	1
	Frost's Class B'k of Nature,	5
	Goldsmith,	2
	Good's Book of Nature,	2
	Goodrich,	1
	Parley,	1
	Smellie,	22
	Smith,	1
Physiology,	Chambers,	1
	Coates,	6
	Combe,	5
	Comstock,	5
	Cutter,	91
	Griscom,	3
	Hamilton,	1
	Jarvis,	1
	Lee,	2
	Magendie,	1
	Ray,	1
	Miss Taylor,	3
*Zoology,	Agassiz,	2
	Chambers,	1
	Jaeger,	2
	Reese,	1

6. MORAL, INTELLECTUAL AND POLITICAL SCIENCE.

Criticism,	Alison,	2
	Kames,	38
	Schlegel,	6
Christianity, (Evidences of,).	Alexander,	6
	Butler,	6
	Flatt,	1
	Paley,	14
	Storr,	1

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* Included under Natural History in Schedule 8.

SCHEDULE No. 9.—(CONTINUED.)

SUBJECTS OF STUDY.	BOOKS USED.	No. of Academies.
Ecclesiastical History,	Mosheim,	1
History,	Bloss,	7
	Goodrich,	11
	Guizot,	1
	Lyman,	2
	Magnall,	2
	Markham,	1
	Parley,	17
	Perkins,	1
	Robbins,	52
	Rollin,	3
	Russell,	2
	Taylor,	6
	Tyson,	2
	Tytler,	7
	Whelpley,	4
	Willard,	16
	Wilson,	3
	Worcester,	11
History of the United States,	Bazeley,	1
	Frost,	1
	Goodrich,	20
	Grimshaw,	1
	Guernsey,	7
	Hale,	15
	Olney,	2
	Parley,	6
	Snowden,	1
	Willard,	21
	Willson,	31
Law, (Constitutional and Government,)	Mansfield,	1
	Shurtleff,	2
	Story,	1
	Sullivan,	2
	Tocqueville,	1
	Wilson,	1
	Young,	11
Logic,	Hedge,	26
	Tappan,	4
	Whately,	14
Natural Theology,	Butler,	5
	Fergus,	1
	Paley,	17

SCHEDULE No. 9.—(CONTINUED.)

SUBJECTS OF STUDY.	BOOKS USED.	No. of Academies.
Philosophy, (Intellectual,) ..	Abercrombie, ...	48
	Brown, ...	2
	Locke, ...	1
	Mahan, ...	1
	Pearl, ...	1
	Schmucker, ...	1
	Stewart, ...	3
	Upham, ...	37
	Watts, ...	29
Philosophy, (Moral, ...	Abercrombie, ...	5
	Barnes, ...	1
	Boyd, ...	5
	Dimond, ...	1
	Paley, ...	9
	Stewart, ...	1
	Watts, ...	5
	Wayland, ...	60
	Whewell, ...	1
Political Economy, ...	Potter, ...	1
	Say, ...	3
	Wayland, ...	9
Psychology, ...	Cousin, ...	1
	Marsh, ...	1
Rhetoric, ...	Blair, ...	29
	Boyd, ...	28
	Campbell, ...	1
	Jamieson, ...	3
	Newman, ...	35
	Parker, ...	5
	Whately, ...	5
Teaching, (Principles of,)...	Abbot, ...	2
	Hall, ...	1
	Page, ...	7
	Rich, ...	1
Theology, ...	Finney, ...	1
Phonography, ...	Andrews & Boyle, ...	4
Phrenology, ...	Combe, ...	1

N. B. Mr. Thomson, author of an Arithmetic, Editor of Day's Algebra, and author of various mathematical works, represents that his name is frequently mispelt in the Annual Report. I have hence been induced to notice more particularly the reports of academies, and find that at least one half return his name incorrectly *Thompson.*

In Westfield Academy, there is no instruction in French, hence totals 24 and 133.

SCHEDULE No. 10,

Containing extracts from the remarks submitted by the trustees or teachers of Academies, in their reports to the Regents of the University, for the year 1849, *on the peculiar modes of instruction adopted by them, and on other special matters relative to education.*

[NOTE.—"The Regents, in this and in former reports, in presenting these general and sometimes speculative views of education, as well as occasionally criticisms or commendations of elementary books or of modes of instruction, do not assume or assert as their own, the opinions expressed in the various returns selected for publication. These are given as the views of enlightened and experienced persons employed in actual instruction, which even if in some degree inaccurate, must have a share of utility in inviting the attention of those engaged in the same pursuits, to the consideration of topics important to the best interests of society, but which, if correct, are of the highest and most direct utility, in diffusing valuable information amongst those who, being practically employed in the business of instruction, may make an immediate and beneficial application of the knowledge thus communicated."—*Extract from Regents' Report of* 1841.]

CANANDAIGUA ACADEMY.—Resignation of Mr. Henry Howe, after twenty-one years' service as Principal.

To the Trustees of the Canandaigua Academy—Gentlemen: During the last year, a declining state of health has often reminded me that I might soon be unable to sustain the cares and responsibilities devolving on the Principal of the Institution under your care. On your invitation I came here, a stranger, twenty-one years since; and amidst my labors and anxieties as a teacher, I have received, during this time, your unwavering confidence and continued support. For your kindness and confidence you have my most grateful acknowledgments. Under your wise supervision, and aided by experienced and skilful associates, I have had the pleasure of seeing Canandaigua Academy sustain a respectable rank among sister institutions, and enjoy a uniformly extended and liberal patronage.

These years have produced great changes. Only five members of your board who invited me here, remain in this place. One half of your number I have followed to the grave. Thaddeus Chapin, Israel Chapin, William A. Williams, Jasper Parrish, Moses Atwater and Walter Hubbell, will be long remembered as pioneers in laying the foundations of the social, civil and religious institutions of Western New-York. Their names will be mentioned with those of Oliver Phelps and Nathaniel Gorham, whose enterprise first explored this country, and whose liberality founded its oldest literary institution,—Canandaigua Academy.

Under your fostering care; with buildings which in respect to comfort, convenience and situation are unsurpassed; with choice apparatus and valuable cabinets; surrounded by a community highly intelligent, public spirited and of elevated moral worth, and taught by such teachers as may remain and by those whom you may select to supply the vacancies occurring,—Canandaigua Academy is, I trust, destined to a long course of usefulness and increasing prosperity.

Of the sympathy and of all the acts of kindness shown me and mine, in times of oft-repeated and afflicting bereavement, by yourselves, by your families and by numerous others in this community, I shall ever retain a most lively remembrance.

I hereby respectfully tender the resignation of the office of Principal of Canandaigua Academy, the same to take effect on the 20th day of March next.

With high regard for you individually, I am gentlemen, your friend,

HENRY HOWE.

Canandaigua Academy, February 10, 1849.

Reply of the Trustees.

CANANDAIGUA, *April* 3*d*, 1849.

To Mr. HENRY HOWE, Dear Sir: In reply to your letter of the 10th February, 1849, we herewith communicate to you the resolutions adopted at a meeting of this Board on this 3d day of April, 1849.

We take this opportunity also to reciprocate the expressions of respect and good will addressed to us in your letter. Our intercourse with you, both personal and official, has been such as could not fail to be pleasant to us and honorable to you. When you retire from the arduous duties you have so long faithfully performed, you will carry with you into more private life not only our individual regards, but the reward of public confidence and esteem; and we hope you will regain, in a continued residence among us, the health and tranquility which your past exertions will make at once the more merited and more grateful.

Respectfully and cordially your friends,

OLIVER PHELPS,
NAT. W. HOWELL,
THOMAS BEALS,
F. GRANGER,
J. WILLSON,
CHA'S SEYMOUR,
THADDEUS CHAPIN,
O. E DAGGETT,
N. GORHAM.

Resolutions.

At a meeting of the Trustees of Canandaigua Academy, held April 3d, 1849, a communication having been received from Mr. Henry Howe, the Principal of the Academy, tendering to this board his resignation of that office from the 20th March, 1849, on account of his impaired health and the length of time in which he has borne its labors and anxieties:—

Resolved, That while we regret the occasion which leads him to propose this change, we cannot but appreciate his motives, and we accordingly accept his resignation.

Resolved, That the growth and prosperity of the Institution during the twenty-one years in which he has presided over it, afford a satisfactory testimony to the fidelity with which he has discharged his trust.

Resolved, That as trustees of the Academy, we hold in high esteem the energy, prudence and liberality, which have characterized him in the office of teacher, and in the charge of the pupils received into his family.

Resolved, That our official connection with him in conducting the affairs of the Institution, and our intercourse as fellow citizens and friends, have given us most favorable impressions of his capacity and worth as an instructor and a man.

Resolved, That in accordance as we believe with the sentiments of this community, we cordially express to him our best wishes for his future health and happiness, and our satisfaction in knowing that when no longer connected with the Academy, he will still make this place, where he has resided and taught for so many years, his home.

That these resolutions be communicated to Mr. Howe, and a copy of them entered on the minutes of this meeting.

OLIVER PHELPS, *President.*

THOMAS BEALS, *Secretary.*

At a subsequent meeting of the trustees, Mr. Howe was unanimously elected a trustee of Canandaigua Academy.

DEAF AND DUMB INSTITUTION, NEW-YORK.—The number of pupils embraced in the foregoing returns is two hundred and twenty-two. At the close of the academic year, forty-two left the Institution, and forty-four have since been admitted, making the whole number who have been under instruction during the year, two hundred and sixty-four.

Of the present number of pupils whose names are recorded above, one hundred and twenty-seven are males, and ninety-five are females; of whom one hundred and sixty are supported by the State, sixteen by the corporation of New-York, seven by the State of New-Jersey, twenty-seven, in whole or in part, by their friends, and the remainder, ten, are provided for by the Institution.

The general health of the establishment does not form an exception to that of former years. There have been but two deaths during the year; one from measles, of which there were, in the month of April, from forty to fifty cases; the other, that of a lad of seventeen, of a delicate constitution, nervous temperament and deformed figure, who fell a victim to consumption.

In this connection, the Board cannot forbear to notice the remarkable exemption from the attacks of the Asiatic Cholera, enjoyed by the members of the Institution, while hundreds, in its immediate vicinity, were stricken down by the disease on the right hand and on the left. This is the third time the epidemic has visited our city, but in neither instance has the plague been suffered to come near our dwelling. Such repeated instances of God's providential interposition, in behalf of the objects of our charge, should awaken emotions of gratitude, and be recorded to the praise of his goodness.

In the departments of domestic economy and government, there has been no change which requires specific mention. The same provision exists for the comfort and happiness of the pupils, and the same attention and care for the preservation of their health, and for the formation of correct habits.

Instruction has been imparted as heretofore to all the male pupils, in some branch of the mechanic arts. In an institution for the deaf and dumb, the mechanical education of the pupils is of very high importance. Necessitated, as, from the nature of things, most of them must be, to depend upon the labor of their hands for subsistence, we should but half discharge our duty toward them, should we suffer them to leave us without some species of knowledge which could be turned, in this way, to immediate account.

Another volume has been added to the "Course of Instruction," prepared with special reference to the wants of the deaf and dumb. Including the Scripture Lessons, this course now embraces four volumes, and, as it respects the vocabulary, the syntactical arrangement, and the idioms of the language, is believed to be sufficient to enable them to acquire, under the guidance of an intelligent instructor, a simple, yet correct style of expression. These works are all that will be required to teach the elements of connected discourse; it is intended to add others to aid the pupil in his independent efforts to obtain a knowledge of facts, through the medium of alphabetic language, and also to improve and elevate his style of writing.

In answer to the inquiry which has often been made, "How do you begin to teach your pupils language?" the Board have thought it might not be amiss to illustrate very briefly some of the first processes, and to point out the uses of the principal instrument employed in their instruction.

When first brought into the school-room, our pupils, with a view to establish a medium of communication between them and their teacher, and to ascertain their knowledge of things, are shown some moveable objects, and questioned concerning their uses. A book, for instance, is presented to them, and they are asked what it is for? They answer by a look of wonder. The inquiry is then varied, and the more ludicrous and absurd the questions the better, inasmuch as by this means it not unfrequently happens that they catch the object of the inquiry. If they seize the idea, bringing the hands together, spread out with the palms upwards to represent an open book, they indicate its use by running the eyes from one side to the other, as if in the act of reading. A key is represented by the act of turning the hand in imitation of locking or unlocking a door; a pen, by writing; a watch, by putting it to the ear, or by imitating the movements of the hands over the dial. When they have once got the clue to the meaning, they will go on and represent every object that may be pointed out to them, and will vie with each other in giving its characteristics and uses.

The next step is to write upon one of the large slates the names of an object. The pupils have no conception of its meaning. A pupil, as the case may be, is called in from another class; the teacher points to the name, the pupil points to the object. Other names are then written down, and the objects respectively pointed out. In this way, they obtain the idea, for the first time, that the three or four crooked marks addressed to the eye is the representative of the thing before them.

They are then taught the manual alphabet, the correspondence between the written and printed character, and to form letters with a pen. They are next taught in succession, the names of objects, qualities and actions, which are subsequently embodied in phrases to illustrate their meaning and use. These elements of connected discourse, as they are successively taught, are committed to memory, usually by means of the manual alphabet, which is nothing more than a mode of indicating the written characters by different positions of the fingers.

The principal instrument used in the instruction of the deaf and dumb is the language of motion and expression. It will not be consistent with the limits of this paper to give an exposition of its elements, but we will endeavor to state, as clearly as we can, its prominent uses in our system of instruction.

Notwithstanding very considerable diversities on minor points of theory and practice, the schools in France, Italy and the United States are usually classed together, as following the system of De l'Epée and Sicard, at least so far as respects their employment of an expanded and improved dialect of gestures as the principal means of instruction in written language, and during the first few years at least, in other branches of knowledge.

The great end of instruction with us, is that full development and cultivation of the intellectual and moral powers, that growth of the understanding and the soul, that shall prepare the deaf and dumb for usefulness and happiness in this life, and open to them the promises and consolations of religion. To defer the religious and moral instruction of our pupils, till that instruction can be, to an extent, comprehended if given in words alone, would, in some cases, be to postpone it forever, and in most cases to defer it to a late period of the course; and then the lessons, cold and lifeless, in comparison with those we give in signs, may indeed be retained in the memory, but will make but a feeble impression on the heart. This consideration alone would decide us to employ the language of signs, even were it true that the use of this language retards the acquisition of written language. Philosophy and experience, on the contrary, both go to show that the reverse of this is the case, and that our pupils learn more rapidly than in schools where the use of the language of signs is most restricted.

There are but two species of language that can become vernacular to man; we mean, that children will learn instinctively and spontaneously, by the mere faculty of imitation and the sympathy of mind with mind; a language of articulate tones on the one hand, and a language of gestures and expressions of the countenance on the other. Though the superior convenience of speech, for those who hear, has caused it to become, from time immemorial, the great instrument of human thought and of the commerce of mind with mind, still, it is undeniable that, in its first elements, the language of gestures is the most natural and intelligible. Nor is it less capable of expression and cultivation. In its cultivated form it is, indeed, hardly more intelligible to strangers than a foreign spoken language; still we know by daily experience, that children, whether deaf or not, brought up among persons who use such an improved dialect of gestures, learn it with the same ease with which children who hear learn their mother tongue; while no instance is known in which a language of words, whether written, spelled on the fingers, or read in the movements of the lips, has been acquired, by a deafmute from birth, without long and laborious instruction.

Hence we hold, that our language of words can fully reach the soul only through the medium of the auditory nerve, and that when this passage is closed, before such a language has been acquired, the visible representatives of words, even the motions of the vocal organs which produce them, can never possess for the deafmute that life and unction which, for us, they borrow from our recollections of the intonations of the living voice. A language that must be thus artificially constructed, composed of a bewildering mass of characters, to the pupils as arbitrary as the Chinese, is ill adapted to communicate the Promethean fire from mind to mind, or to favor free and rapid interchange of thought. If a deafmute, therefore, in the earlier period of his instruction, be restricted to the use of words, in whatever form words may be presented to him, the free development of his mental faculties will be impeded. He may, in time, come to use simple language correctly in the ordinary occasions of life; but the free and intimate communion of thought and feeling, and the equal and unrestricted competition of mind with mind, which stimulate the mental activity, and develope the faculties of children conversing in their own vernacular, whether of speech, or gestures, will be lost to him.

Now in this statement of the case, we can hardly hesitate to decide that if, by use of the language of signs in our school, the faculties of our pupils are much earlier awakened, and much more rapidly developed, then this use will favor their more rapid acquisition of our written language; for surely the best developed and most active minds, other things being equal, will make the most rapid progress in every difficult study.

But we derive from our language of signs another advantage, hardly less important, the ability to explain clearly to the pupil the meaning of words not expressing sensible things; such adjectives, for instance, as *kind*, *cruel*, *wise*, *ignorant*, *brave*, *timid*; such verbs as *know*, *understand*, *respect*, *forget*, *reward*, *punish*, etc., can be clearly explained to pupils of only a few months' standing. Nor is it to be forgotten that by means of a regular system of grammatical signs which, being founded upon analogy, are readily understood and easily remembered by deafmutes, we can make them sensible of the difference of construction required by different parts of speech; for instance, that *fear* and *love*, as verbs, have one construction, and *afraid* and *fond*, as adjectives, have a different construction. Similar means are used, at a somewhat later period, to explain the construction of the abstract noun.

We can hardly be said to teach our pupils signs, except grammatical signs just mentioned. They teach themselves, and, in fact, were originally the masters of this mode of communication. Still we aid them in their constant efforts to improve and develope this their favorite language, which, transmitted from one generation of pupils to another, is constantly becoming more graceful, clear, and precise. As it now exists in our institutions, it is fully capable of expressing with accuracy, though as yet, in many cases, with circumlocution, every shade of thought and of feeling; of not merely recalling sensible objects, and familiar incidents, but of leading the pupils through all the realms of nature and art, through the successive stages of human progress from remote ages, and of conducting his untried steps into the wide domain of the intellectual and moral world.

The development of their colloquial dialect of gestures, which has been explained, is sufficient to account for the early and rapid progress of our pupils in general knowledge; and the great advantage of this is eminently illustrated by some of our former pupils who, having been removed from our care before they acquired sufficient knowledge of written language to converse, except in a mixed dialect of signs and words intelligible to their acquaintances, are still decidedly intelligent, fully aware of their rights and duties as citizens, as Christians, and as heads of families, and are, in short, respectable and useful members of society.

The progress of our pupils in written language, though due, in no small measure, to the improvement of their own language of signs, enabling us readily to explain a given word by means of a simple and familiar sign, and explain and impress on the memory the laws of construction, is yet to be ascribed, in at least equal measure, to the system with which the difficulties of language are graduated and presented, so as to lead the pupil by successive steps from the easy and simple to the difficult and complex; from general laws to idioms; from sensible qualities, relations, and actions to intellectual and moral.

By order of the Board of Directors.

HARVEY P. PEET, *President.*

NEW-YORK FREE ACADEMY.—*Extracts from the Annual Report.*—The Board of Education of the city and county of New-York, respectfully present to the Regents of the University of the State of New-York, their first annual report of the operations and condition of the Free Academy, in pursuance of the provisions of the act passed May 7th, 1847, authorising said Board to establish a free Academy in said city.

Section thirteen of the act rendered it necessary that the question, whether such Academy should be established, should be submitted to the people at the school election to be held on the first Monday of

June in the same year. The result of the vote was 19,404 in favor of establishing the Free Academy, to 3,409 against it. Measures were, thereupon, immediately taken by the Board of Education, to carry into effect the provisions of the act. A site was purchased, and contracts made for the erection of a building. This was completed so as to be ready for occupation in January, 1849.

The site, on the corner of Lexington avenue and 23d street, was purchased at a cost of $25,000. The building has been erected for the sum of $48,000. For fixtures and furniture, services of architect, &c., the sum of $11,789.91 has been expended. For text books and supplies, at the organization of the institution, $2,422.70. And there has been expended since that period, and up to the present date, for library books, $369.49, and for philosophical apparatus, $2,467.61. Making the total expenditure thus far, for all objects, exclusive of the support and maintenance of the institution, $90,049.71.

These sums have been raised by taxation of the real and personal property of the inhabitants of the city and county of New-York.

The first section of the act limits the privileges of education furnished by the Free Academy to "persons who have been pupils in the common schools of the city and county of New-York." The following rules were adopted by the Board of Education, regulating the admission of students:

1. There shall be semi-annual examinations for the admission of students, and the first examination will commence on the 15th day of January, 1849.

2. No person shall be examined at the first examination, who has not been a pupil in the common school for the period of nine months, nor at any subsequent one, unless he has been such pupil at least one year.

3. No person shall be entitled to admission unless he shall pass a good examination in

Spelling,
Reading,
Writing,
English Grammar,
Geography,
In all the Rules of Arithmetic, and
In the History of the United States.

An additional rule was adopted May 16th, 1849, prescribing a limit of age.

4. No person of less than twelve years of age, shall be entitled to admission.

Two examinations for admission have taken place since the opening of the Institution, each occupying about two weeks; the one commencing January 15th, and the other July 12th, 1849. These examinations are conducted very rigidly, and with such precautions as seem to insure perfect impartiality.

At the first examination, 272 candidates from the public and ward schools were examined; of whom 143 were admitted, as having passed a good examination in the subjects designated. At the second examination, 136 were examined; of whom 59 were admitted. The next examination for admission will commence on the 4th of February proximo.

The entire course of instruction to be pursued in the Free Academy has not yet been defined. The plan will be matured hereafter, when the educational wants of the pupils shall have been fully ascertained, and when experience shall have demonstrated how rapidly pupils, trained in the common schools, and commencing a thorough course of superior education from the highest grade of attainment reached in them, can progress under a system that shall drop the indolent and incompetent, and stimulate all to their best exertions.

The table given below in this report exhibits the studies that have been pursued during the past year. The daily scheme for five days in the week embraces three several recitations for each student in the Mathematical department, in the Belles Lettres and History department, and in the department of Languages. Besides the three recitation hours, one hour each day is devoted to Drawing and Phonography alternately. The students assemble at 9 A. M., and remain till 3 P. M., with a half hour's intermission at 12 M. There remain, therefore, an hour and a half of time for study in the Institution. On Saturday, the students assemble for Declamation, and for one hour's exercise in Drawing or Phonography.

The Academic year will be divided into two terms, the one commencing 1st September, at the end of the principal vacation, and the other commencing middle of February. At the close of each term, there will be an examination of the classes in the Institution, in the studies they have been pursuing during the term; when, those students who are found qualified, will be advanced. Those who are not found qualified to enter upon advanced studies, will be allowed to pursue over again, the studies of the term over which they have just passed, or be subjected to such discipline as the several cases may demand.

One examination of the students of the Free Academy has been held, at the close of the first term, occupying from July 2d to July 10th, (inclusive) 1849. At this examination 77 students were advanced, and 58, being the remainder of the class, were turned back to pursue over again the studies of the first term.

The next examination of the classes will commence January, 21st instant.

Value of Library and Apparatus.—The Board of Education have authorised the sum of $5,500, to be expended for chemical, astronomical, mathematical, and philosophical instruments and apparatus; and the sum of $500 for library books.

The greater part of the apparatus has been ordered. The amounts that have been paid out up to the present date, are specified above in this report.

For philosophical apparatus,	$2,467 61
For library books,	369 49

Names and compensation of Instructors.

Horace Webster, LL. D., Principal, salary per annum,	$2,500
Edward C. Ross, LL. D., Professor of Mathematics and Natural Philosophy,	1,500
Gerardus B. Docharty, Asst. Professor of Mathematics and Natural Philosophy,	800
Theodore Irving, Professor History and Belles Lettres,	1,500
John J. Owen, D. D., Prof. of Latin and Greek Languages and Literature,	1,500
Oliver W. Gibbs, M. D., Prof. of Chemistry,	800
Paul P. Duggan, Prof. of Drawing,	500
Edward C. Marshall, Asst. in the Dept. of History and Belles Lettres,	700
George W. Huntsman, Asst, in do,	700
Norman A. Beach, Assistant,	350

John Roemer, Prof. of the French Language, compensation $1 per hour for each hour's instruction.

Augustus F. Boyle, Instructor in Phonetics and Phonography, compensation $1 per hour for each hour of instruction.

In addition to the above, Augustus I. Morales, has been appointed Professor of the Spanish Language, and Theodore Glaubensklee, Professor of the German Language and Literature, who have not yet commenced giving instruction. Their compensation will be regulated as that of the Professor of the French Language is adjusted, by the amount of service performed.

RIGA ACADEMY.—In regard to the subjects to which our attention is invited by the Secretary of the Regents, the principal would add a few words.

It would be most fortunate for us if the subject of elementary instruction obtained its share of attention in our common schools, but it is not a characteristic of the American people to be thorough, and we must not censure too severely the teacher of the common school, till the beam is removed from our own eye. Students of all ages who come to us for instruction, are frequently found to be grossly deficient in the elementary branches. Hence we are obliged to spend as much time as is consistent with other duties, in imparting instruction in these branches. We spend an hour of each day with the younger portion of the school, and one hour per week with the more advanced.

In spelling we have found that many of our pupils have been accustomed always to associate the spelling of words with their sound and not with their appearance: hence when they sit in silence and write words, they write incorrectly, while they will spell orally from one end of Webster's Spelling Book to the other. To correct this defect, our exercises in spelling are written upon the slate, as they are pronounced by the teacher. The slates are then exchanged and the same words spelled orally, while each one marks the words misspelled upon the slate which he has. Again, each one is called upon to give the spelling of the misspelled words and they are marked, to be taken up first at the next lesson. This brings the words which are most liable to be spelled wrong, under their eye for a number of times and its true orthography will be apt to remain fixed in the mind. The exercises in composition as described upon the last one or two pages of the report accomplish the same results quite satisfactorily.

The suggestions of the Secretary of the Regents, in respect to pronunciation, are followed in this school, and Webster's late edition is the standard.

As it regards subjects of study, we aim at thorough discipline of the intellectual powers, and wish rather to teach a few things thoroughly than to attempt in the brief portion of time allotted us, to teach all the varieties of subjects which are sometimes introduced into the academy. There are many things desirable for the student to know, which it is not advisable to introduce as subjects of study in a school of this kind. A mind well disciplined, is prepared to learn them in their course of reading in after life.

The importance of physical education in connection with mental, is rarely over estimated.

Our school rooms are thrown open during every intermission, and our benches are well constructed.

In composition, exercises are required of the pupil every fortnight. The object of these exercises, as stated in the 98th page of the Instructions of the Regents, is two fold, both to habituate the pupil to carry on trains of thought in his own mind, and to give him a facility of expression.

To teach *how to think*, is or should be the principal object of the whole course of discipline in the school room. Every mind is full of thoughts, and he who has these under perfect control, so that they will go and come at his bidding, is the educated man. Practice will accomplish this, and this practice should be the practice of the school. So the power of readily expressing the thoughts is the result of habit, and a habit to the formation of which too little attention is paid. If the pupil is called upon to write a composition, it seems an enormous task and one whose accomplishment is deferred as long as possible, for the reason that he attempts what is above his own powers, taking for a subject something beyond his capacities, or attempting to say something of it which is new to every body. Hence, this alone does not accomplish much towards the end designed, especially with the younger portion of the school.

We have found it a very profitable exercise to relate an anecdote to a class seated with their slates in hand, and require each one to write it in their own language. As many of the slates as the time will allow are then read and corrected before them all, some of the most prominent of the errors being exhibited on the black-board and corrected by the class; here the punctuation, spelling and grammatical errors pass under review. At another time, the process of preserving, or manufacturing some article of daily use is related to the class and they write it. Matters of interest of this kind will suggest themselves in every variety to the skilful teacher, and the exercise will accomplish the two fold object of giving useful instruction in an indelible form and of giving an opportunity of expressing thought without covering the deed with the bugbear name of *composition*. An abstract of the lessons in philosophy or elsewhere sometimes takes its place.

For the more advanced scholars, the analysis of specimens of English prose or poetry with a special reference to its beauty of expression or thought, is found a useful exercise. Some two hours of each week have been devoted to exercises of this description, and we consider them as profitable as any of the school. It is expected too, that what is written upon the slates will be copied into a blank-book for the purpose, and corrected in reference to the taste and neatness displayed in its arrangement upon the page.

With the hope that the brevity of these remarks may not lead to misconstruction, I am yours truly,

For the cause of education,

R. D. H. ALLEN.

ROCHESTER COLLEGIATE INSTITUTE.—In Rochester Collegiate Institute the same general course of studies and duties, as before reported to the Regents of the University, has been pursued in the past year, 1849. The exercises begin at 9 A. M. with the reading of some portion of Scripture and prayer, at which all the students are expected to be present. This is often followed by a short lecture from the Principal or one of the assistant teachers. The topics of the lecture take a wide range. It is a favorable time to speak on manners, morals, and the regular course of duties, as well as on everything which tends to exercise and improve the powers, discipline the understanding, and elevate the whole character. Industry, attention, perseverance, activity, honesty, purity, high and noble aims and ends, come before the pupils with much interest. I attribute the cases of discipline, so rare as to be uncommon and unexpected, to the influence of this course, united with a general, constant supervision. To lead a child or youth to self respect is the first step to mental and moral improvement. The conscience and the heart are exercised and improved, and the soul is roused to honorable effort.

In these lectures, too, numerous subjects in philosophy, arts, chemistry, language, commerce, geography, and the passing subjects of the times, often so full of attraction, come into consideration. Much is, and will be long, remembered.

In natural philosophy and chemistry, the course of experiments is long and full enough, and large numbers attend them. In the languages, great efforts are made to render the study practical in respect to our own language, and the happy use of language. In the study of grammar, the analysis of sentences, the connection of the parts, and the influence of words in the development of thought, is carried to all reasonable extent.

Webster's Dictionary is the adopted standard. The quarto edition, if not approved in every particular, is the most complete work on the English language ever formed. Indeed, there seems to be but few things more to be desired for a work of this character and object. Its fulness is a monument of indefatigable effort. It is an admirable plan to place it in every district school, that it may be a book of familiar resort.

C. D.

A useful table, often needed.

A Paris line = 0.088815, or nearly $\frac{8}{90}$ of an English inch.
A Metre = 39,371 inches English, or 3,281 feet English.
A Centemetre = 0.39371 " or a little more than $\frac{1}{30}$ inch "
A Millimetre = 0.039371 " or " $\frac{1}{300}$ inch "

Humboldt's Cosmos.

C. D.

The beginning of a Century—when?—To answer this question, begin at the commencement of time. The year *one* begins with its first instant, and ends with its last, and is called the *first* year. At the end of the first, the year *two* begins, and is the *second* year to its end, and at its close two years are completed. So at the end of the *tenth* year, ten years are ended; and at the close of the *fiftieth* year, fifty years are completed, or the year *fifty* is terminated; at the end of *one hundred years*, the hundred years are ended, or the *first century* is completed; and at the end of *eighteen hundred* years, the *eighteenth* century is ended. At the beginning of *eighteen hundred and one*, the *nineteenth* century is begun, so that eighteen hundred belongs not to the *nineteenth* century. Hence, the close of this year (1850) will end the *first fifty* years of the present century, and the *second half* of this century will begin with the first instant of the year *eighteen hundred and fifty-one*, or, the *first* half of this century will end with the last instant of December, *eighteen hundred and fifty*.

C. DEWEY.

Botany in Academies and Higher Schools.—This study of Botany should be very interesting to young ladies and young gentlemen in the schools. The objects are so various and beautiful, from their relations as well as in themselves, that they are fitted to excite the taste and imagination and to improve the intellect. Indeed, the study of the objects of natural history, calls into operation certain important faculties, which are liable to be partially neglected, such as attention, discrimination, comparison, and generalization. How few have any adequate conception of the number and variety of plants around them, from the want of attention and discrimination, and of the affinities of plants, because the power of comparison is not exercised The power of abstraction and generalization, so important in the active duties of life, is greatly and happily improved by this study.

Great improvement has been made in the works on Botany in the past few years, and several excellent authors are easily accessible. The study by the natural method, too, and not merely by the Linnean classes, is now the only approved one. Besides being more satisfactory in its results, it is far more gratifying in its details. Ladies are specially interested in the study of the natural system.

Wood's Class-Book of Botany is formed on this plan, and is finely adapted to the object to be attained. It ought to be the text-book in our academies and select schools. Besides our native plants, it contains a multitude of the more common exotics, now so frequently cultivated for their beauty, and many of which were very rare till within a few years. In this work they are fully described and classified, making them as accessible as our students desire.

Wood's First Lessons in Botany is an excellent and comprehensive book for beginners or younger students. The study of its principles alone is more important than all the botany usually acquired from the Linnean classes. It gives true knowledge, derived from the structure of plants and their organization. It is cheap, too, and very attractive.

Those partially acquainted with the Linnean method readily acquire the natural system. Specimens should be selected to be used at the recitations, for it is a waste of time and a perversion of memory to attempt to acquire the knowledge without the objects which exemplify the principles. In this case we have *things*, and not mere words; the structure, relations, affinities, and uses of plants and their parts, and the wonderful economy of nature under the providence of the great Creator.

C. DEWEY.

Rates of Distribution for the last twelve years.—Previous to 1847, the amounts granted were distributed according to the number of students allowed in each Senatorial District (and $5,000 to each district.) The rate mentioned below is what would have been allowed if the apportionment had been made for the whole State.

In 1847, and subsequently, it was made for the whole State.

	Number of Students.	Money granted.	Rate.
1839	7,070	$40,000	$5 66
1840	8,842	40,000	4 52
1841	10,186	40,000	3 92
1842	10,560	40,000	3 78
1843	11,277	40,000	3 55
1844	11,699	40,000	3 45
1845	12,257	40,000	3 26
1846	13,481	40,000	2 96
1847	13,998	40,000	2 85
1848	14,262	40,000	2 83
1849	15,043	40,000	2 65
1850	16,514	40,000	2 42

AN ABSTRACT

OF THE RETURNS OF

METEOROLOGICAL OBSERVATIONS

MADE TO THE

Regents of the University,

FOR THE YEAR 1849,

BY SUNDRY ACADEMIES IN THIS STATE.

In obedience to Instructions, Dated March 1, 1825.

ACADEMIES.

ACADEMIES.	Towns.	Counties.	Time for which they report.	Observers.
Albany,	Albany,	Albany,	The whole year,	Rev. W. H. Campbell, Prin and Geo. H. Cook, Prof. Math.
Amenia,	Amenia,	Dutchess,	do	Alex'r Winchell, A. B., Teacher.
Auburn,	Auburn,	Cayuga,	do	William Hopkins, Principal.
Cortland,	Homer,	Cortland,	do	George W. Bradford, M. D.
Dutchess county,	Poughkeepsie,	Dutchess,	do	Peter S. Burchan, Principal.
Erasmus Hall,	Flatbush,	Kings,	do	Rev. Thomas M. Strong, Trustee.
Fairfield.	Fairfield,	Herkimer,	do	Linus E. Ford, Esq., Trustee.
Farmers' Hall,	Goshen,	Orange,	do	John S. Crane, Esq., Trustee.
Granville,	Granville,	Washington,	do	John C. Parker, Esq., Trustee.
Hamilton,	Hamilton,	Madison,	do	Monroe Weed, Principal.
Hartwick Seminary,	Hartwick,	Otsego,	do	Rev. George B. Miller, Principal.
Hudson,	Hudson,	Columbia,	do	Jonathan Ford, Principal.
Kingston,	Kingston,	Ulster,	do	Wm. McGeorge, Principal.
Lewiston,	Lewiston,	Niagara,	do	Jonathan Bell, Esq., Trustee.
Mexico,	Mexico,	Oswego,	do	W. H. Gillespie, Teacher.
Newburgh,	Newburgh,	Orange,	do	Rush B. Hall, Teacher.
New-York In. for D. & D.	New-York,	New-York,	do	Oran W. Morris, Professor.
North Salem,	North Salem,	Westchester,	do	John F. Jenkins, Principal, and Jas. H. Jenkins, student.
Oneida Conference Sem.	Cazenovia,	Madison,	do	Edward Bannister, Professor.
Plattsburgh,	Plattsburgh,	Clinton,	do	Joseph W. Taylor, Assistant Teacher.
Rochester Collegiate Ins.,	Rochester,	Monroe,	do	Leander Wetherell, Teacher, and Prof. C. Dewey.
Springville,	Concord,	Erie,	do	J. W. Earle, Principal.
Union Hall,	Jamaica,	Queens,	do	John N. Brinckerhoff, Associate Principal.

JANUARY, 1849.

ACADEMIES.	THERMOMETER.					WINDS, [NO. OF DAYS.]								WEATHER, [NO. OF DAYS.]					Rain gage.
	Mean temperature		Highest degree.	Lowest degree.	Range.	North.	N. East.	East.	S. East.	South.	S. West.	West.	N. West.	Clear.	Cloudy.	Rain.	Snow.	Rain and snow.	
	1st half.	2d half.																	
Albany,	15.98	25.69	46	—10	56	3½	1	½	½	6½	½	5	13½	17½	13½	5	2	1	.76
Amenia,	17.33	26.66	48	— 8	56	8½	..	..	..	8½	4	1½	8½	17	14	5	1	..	....
Auburn,	14.66	26.48	48	— 4	52	3	½	..	½	2	9	½	15½	5	26	5	5	..	4.38
Cortland,	17.13	23.51	45	— 4	49	..	..	..	3½	3½	7	..	17	6	25	6	14	..	....
Dutchess,	18.04	28.83	53	— 8	61	8	7	½	½	1	8	2½	3½	5½	25½	3	..	..	.45
Erasmus Hall,	23.30	32.98	57	1	56	½	2	..	1½	..	7	3	17	20	11	5	..	..	.55
Fairfield,	10.90	19.06	45	—18	63	½	1½	½	5½	½	½	12	10	13½	17½	3	6	..	3.09
Farmers' Hall,	18.04	28.48	52	—17	69	..	7	..	½	½	9½	2½	11	19	12	5	..	..	.90
Granville,	10.31	19.94	48	—22	70	11	..	..	..	1	12½	3	3½	20	11	1	1	1	.80
Hamilton,	16·49	23.28	44	—15	59	½	..	..	..	10	1	1½	18	8½	22½	4	12	..	1.18
Hartwick,	15.32	25.16	50	—20	70	..	½	..	½	10½	2	..	17½	12	19	1	2	..	.75
Hudson,	15.51	24.51	53	—11	64	8	..	..	3	5½	..	½	14	15	16	5	..	..	.73
Kingston,	20.92	30.30	50	— 8	58	½	4	..	10½	..	6½	..	9½	23½	7½	6	1	..	2.65
Lewiston,	20.93	27.52	50	2	48	1½	1	3	3	2½	8	7	5	9	22	4	3	2	2.00
Mexico,	13.95	19.75	40	—10	50	3	1	..	7	2½	½	8½	8½	10	21	4	9	2	.61
Newburgh,	20.17	28.70	51	—10	61	10	3½	1½	2½	2	1½	7	3	18	13	2	1	..	.52
New-York Ins.,	21.17	30.68	49	— 2	51	..	3	..	2	½	7	4	14½	15	16	6	1	..	.65
North Salem,	18.29	27.61	52	— 4	56	3	½	½	3	6	3	4½	10½	21	10	4	1	..	1.55
Oneida Conference,	13.85	19.36	46	—12	58	..	..	..	1½	7½	10½	8½	3	6	25	6	14	2	1.99
Plattsburgh,	14.69	19.77	52	—13	65	10	3	..	1½	6	2½	2	6	11½	19½	3	10	..	2.30
Rochester,	19.15	26.29	47	— 9	56	4	1	½	1	1	4½	5½	13½	5	26	4	22	3	1.39
Springville,	16.29	27.09	49	—20	69	½	½	..	1	1	5	12	11	8	23	5	15	1	....
Union Hall,	21.28	29.67	58	— 7	65	2½	1½	..	½	½	7½	1	17½	14	17	4		..	.10

FEBRUARY, 1849.

ACADEMIES.	THERMOMETER.					WINDS, [NO. OF DAYS.]								WEATHER, [NO. OF DAYS.]					Rain gage.
	Mean temperature 1st half.	Mean temperature 2d half.	Highest degree.	Lowest degree.	Range.	North.	N. East.	East.	S. East.	South.	S. West.	West.	N. West.	Clear.	Cloudy.	Rain.	Snow.	Rain and snow.	
Albany,	19.58	22.06	46	— 7	53	1½	2½	1	..	8	1	1	13	13	15	..	8	1	1.25
Amenia,	20.25	20.00	46	—16	62	1	3½	..	4	5	1½	1	12	13	15	..	8	1	....
Auburn,	18.19	20.34	42	— 6	48	10	..	..	2	2	5½	..	8½	10½	17½	2	2	1	2.52
Cortland,	18.50	20.93	48	—10	58	..	..	..	4	3½	9	..	11½	13½	14½	..	11	1	....
Dutchess,	19.67	22.19	48	—10	58	7	11½	..	..	½	5½	1	2½	1½	26½	1	7	..	1.42
Erasmus Hall,	27.01	26.03	46	3	43	4	8	..	1½	½	2½	3	8½	15	13	2	6	3	2.23
Fairfield,	13.13	20.06	47	—12	59	..	½	4	14	½	1	2	6	12	16	..	10	..	1.86
Farmers' Hall,	21.94	21.58	52	—16	68	2½	11½	..	..	1	2½	7	3½	13	15	1	7	..	1.90
Granville,	15.26	17.81	48	—24	72	14½	..	2½	2½	1½	3½	1½	2	14½	13½	..	6	..	1.08
Hamilton,	19.85	22.33	48	—18	66	½	½	2	1½	8½	2½	2½	10	11	17	..	7	..	.65
Hartwick,	19.49	20.02	48	—19	67	..	2½	..	2½	9	1	2	11	13	15	..	6	..	.94
Hudson,	18.21	20.03	45	—10	55	8½	3	1	2	8	1½	..	4	15½	12½	..	7	1	.62
Kingston,	25.87	20.79	46	—18	64	4	15	..	3½	..	3½	..	2	16½	11½	..	8	..	1.55
Lewiston,	22.82	27.77	60	— 4	64	2	1½	4	3	3½	8	5	1	15	13	3	9	..	1.10
Mexico,	16.87	19.11	46	—24	70	5	..	..	12½	3½	..	5½	1½	15	13	1	9	..	.47
Newburgh,	23.25	22.66	44	—11	55	9	7	2½	½	1	3	15	..	7½	20½	..	9	..	1.66
New-York Ins.,	24.30	24.42	41	2	39	..	10½	..	..	..	4½	1	12	10½	17½	3	8	2	2.60
North Salem,	20.39	21.29	52	—15	67	2½	8	½	5	2	1	1½	7½	14	14	1	8	1	2.09
Oneida Conference,	14.15	19.30	42	—17	59	..	..	..	5	9½	8½	4½	½	12½	15½	1	10	..	.89
Plattsburgh,	12.01	21.02	48	—20	68	11½	1	..	2½	9½	..	½	3	13	15	..	14	..	2.59
Rochester,	20.37	24.01	48	— 7	55	1	5½	2	5½	2	4½	4½	3	7	21	1	17	2	1.29
Springville,	22.00	26.22	60	—11	71	5½	1	2	3½	5	4	6½	½	10½	17½	2	13	1	....
Union Hall,	23.66	21.64	43	— 5	48	1	6½	½	2½	½	2½	1½	13	15	13	3	7	3	1.61

MARCH, 1849.

ACADEMIES.	THERMOMETER.					WINDS, [NO. OF DAYS.]								WEATHER, [NO. OF DAYS.]					Rain gage.
	Mean temperature 1st half.	Mean temperature 2d half.	Highest degree.	Lowest degree.	Range.	North.	N. East.	East.	S. East.	South.	S. West.	West.	N. West.	Clear.	Cloudy.	Rain.	Snow.	Rain and snow.	
Albany,	33.14	40.67	64	15	49	3	1	..	5	4	..	7	11	15	16	5	1	1	2.86
Amenia,	30.12	41.01	57	8	49	1½	3	½	5	4	3½	½	13	12½	18½	7	2	1	....
Auburn,	29.34	35.53	48	10	38	5½	..	..	½	3½	7	½	14	12½	18½	4	1	2	3.78
Cortland,	29.84	37.63	58	6	52	..	..	..	5	3½	8	..	14½	15	16	8	4	1	....
Dutchess,	33.50	41.77	66	12	54	6	13½	..	½	2½	7	..	1½	2	29	6	2	2	2.71
Erasmus Hall,	35.72	44.34	68	23	45	3½	8½	1½	2½	3½	2	½	9	17	14	10	2	2	5.07
Fairfield,	26.35	35.89	60	6	54	..	½	1½	10½	1	½	8½	8½	14	17	5	3	4	1.85
Palmers Hall,	30.94	41.45	62	6	56	..	12	1	½	..	7½	7	3	16½	14½	6	2	..	2.40
Granville,	28.36	39.62	60	6	54	16	..	..	2	3½	8½	½	½	11½	19½	6	2	1	2.04
Hamilton,	30.17	38.65	62	5	57	7	½	1	½	9	1	½	11½	13	18	8	5	4	1.32
Hartwick,	30.07	38.64	58	7	51	½	3	½	1½	11	½	½	13½	17½	13½	2	..	2	1.01
Hudson,	30.50	39.68	56	14	42	8	2	...	3½	6	3	½	9	15½	15½	10	2	..	3.25
Kingston,	36.06	44.28	60	10	50	½	9½	...	9	..	1½	..	10½	19½	11½	10	1	..	2.08
Lewiston,	31.33	38.45	59	16	43	2	1½	6½	2	3	8½	5½	2	14	17	9	..	..	2.54
Mexico,	27.46	34.37	48	10	38	3	..	2	8	3	..	13	2	22	9	5	1	..	1.27
Newburgh,	31.70	40.43	61	10	51	5½	12	1	1	7	..	2½	2	15	16	6	3	..	3.16
New-York Ins.,	37.84	42.00	55	22	33	2	9	½	3½	1½	2½	3½	8½	11	20	10	3	2	5.19
North Salem,	33.08	41.05	62	13	49	3½	3½	1	5	4½	2½	2½	8½	16	15	8	3	2	5.19
Oneida Conference,	26.28	34.55	54	3	51	1	1	½	2	7½	7½	8½	3	10	21	8	4	1	2.66
Plattsburgh,	30.84	38.24	54	9	45	12	..	...	..	9	..	1½	8½	12½	18½	9	4	..	3.69
Rochester,	31.17	37.75	54	12	42	3½	4	½	1½	3½	1½	4½	12	13½	17½	9	5	4	2.35
Springville,	31.86	37.00	55	10	45	3½	6½	1½	2½	2	4	6	5	14½	16½	10	3	3	....
Union Hall,	34.02	42.68	71	20	51	2	8	2	3½	1	5½	1	8	17½	13½	9	4	..	3.69

APRIL, 1849.

ACADEMIES.	THERMOMETER.					WINDS. [NO. OF DAYS.]								WEATHER. [NO. OF DAYS.]					Rain gage.
	Mean temperature		Highest degree.	Lowest degree.	Range.	North.	N. East.	East.	S. East.	South.	S. West.	West.	N. West.	Clear.	Cloudy.	Rain.	Snow.	Rain and snow.	
	1st half.	2d half.																	
Albany,	43.59	44.66	67	24	43	3	..	½	½	8½	1½	5	11	19	11	4	..	2	.75
Amenia,	43.43	39.65	69	19	50	1	1	..	3½	4½	3½	1½	15	17½	12½	3	2	..	....
Auburn,	40.90	36.96	70	18	52	..	..	..	..	4	8½	1½	16	14½	15½	3	2	1	.70
Cortland,	41.99	41.98	65	18	47	..	..	..	4	2½	6	..	17½	17½	12½	4	5	..	....
Dutchess,	47.14	45.18	70	25	45	8½	½	..	½	8	4	2½	6	8	22	4	..	1	.96
Erasmus Hall,	48.29	47.52	66	25	41	2	2½	2½	4	4	1½	3	10½	21	9	5	..	..	.80
Fairfield,	38.17	38.27	64	14	50	½	..	1½	9	½	2	5	11½	16½	13½	6	4	1	2.02
Farmers' Hall,	44.46	43.24	68	20	48	1½	2½	2	3	2	7	2	10	21½	8½	4	1	..	1.00
Granville,	40.93	42.12	70	20	50	9	..	..	½	4½	6	4	6	15½	14½	5	3	..	1.02
Hamilton,	41.87	42.36	72	20	52	½	..	..	½	10½	..	..	18½	14	16	5	3	1	1.47
Hartwick,	43.09	40.78	68	17	51	..	1½	..	1	7	6½	1	13	13	17	4	3	1	.
Hudson,	43.86	42.14	67	20	47	6½	½	1	1	9½	2	..	9½	16	14	3	2	..	1.18
Kingston,	50.68	47.86	70	28	42	..	14	..	4	..	3	..	9	22½	7½	4	1	..	2.15
Lewiston,	42.64	43.75	71	24	47	1½	½	2	1½	5½	7½	6½	5	19	11	9	1	..	1.76
Mexico,	39.28	38.73	68	22	46	..	..	½	9½	..	..	16	4½	21½	8½	5	1	1	1.04
Newburgh,	47.29	44.51	69	26	43	8½	3	½	1	4	4	3	6	16	14	3	..	..	.79
New-York Ins.,	45.89	45.72	62	24	38	1	3	1	5	..	4½	6	9½	14½	15½	6	1	..	1.05
North Salem,	44.69	45.37	68	24	44	1	1	½	7½	4	1½	3	11½	20	10	4	..	..	1.35
Oneida Conference,	39.06	38.70	69	17	52	..	..	..	2½	5½	8	10½	3½	12	18	7	3	1	1.99
Plattsburgh,	40.60	38.64	62	24	38	4	..	..	3	9	..	..	14	14½	15½	4	3	..	2.76
Rochester,	42.55	41.23	74	20	54	2	3½	..	1½	2	5	4½	11½	11½	18½	8	3	1	1.44
Springville,	43.44	43.54	74	22	52	2½	1½	..	3	1	5	12	5	16½	13½	10	6	..	....
Union Hall,	47.04	46.46	71	23	48	½	1	2	3½	1½	9	3	9½	24½	5½	5	..	..	.67

MAY, 1849.

ACADEMIES.	THERMOMETER.					WINDS. [NO. OF DAYS.]								WEATHER. [NO. OF DAYS.]					Rain gage.
	Mean temperature 1st half.	Mean temperature 2d half.	Highest degree.	Lowest degree.	Range.	North.	N. East.	East.	S. East.	South.	S. West.	West.	N. West.	Clear.	Cloudy.	Rain.	Snow.	Rain and snow.	
Albany,	51.39	62.80	79	35	44	1	¼	..	¼	10	..	3¼	16¼	16	15	13	..	..	5.40
Amenia,	50.15	63.18	80	34	46	4	7½	2½	2½	5½	2½	3½	3	10½	20½	9	..	..	....
Auburn,	43.25	50.59	74	34	40	1	3	...	5	2	12½	..	7½	8½	22½	8	..	..	4.30
Cortland,	46.95	55.44	80	32	48	...	...	...	6½	4	7½	..	13	14½	16½	16	..	..	....
Dutchess,	52.64	60.63	86	36	50	11½	1½	4½	1½	10	1	½	½	7	24	12	..	..	6.36
Erasmus Hall,	52.88	58.95	82	38	44	1	10	1½	4½	4½	6	1½	2	17	14	9	..	..	3.76
Fairfield,	43.22	55.01	78	26	52	...	...	7	9½	..	½	14	..	13½	17½	13	..	..	2.80
Farmers' Hall,	51.19	57.28	79	34	45	½	11	3	3	2	5	1½	5	17	14	13	..	..	4.65
Granville,	50.08	58.79	83	32	51	18	1½	1	1	1½	7	½	½	14	17	8	..	..	3.53
Hamilton,	48.10	58.04	85	27	58	½	1	½	3½	8½	1½	..	15½	10½	20½	16	..	..	3.23
Hartwick,	47.58	55.95	83	31	52	1½	...	1	2½	9½	3½	2	11	13	18	9	..	..	1.92
Hudson,	50.07	58.82	84	34	50	12½	2	2	1	11½	½	½	1	11½	19½	12	..	..	4.74
Kingston,	53.84	62.37	86	40	46	...	10	...	15½	..	2	..	3½	20	11	12	..	..	4.98
Lewiston,	49.42	57.59	78	32	46	2	6½	5½	1	2	2	8	4	17½	13½	11	..	..	2.42
Mexico,	43.20	52.92	84	30	54	½	...	2½	3½	2½	½	17	4½	18	13	11	..	..	2.23
Newburgh,	54.53	60 81	90	38	52	8½	3½	8½	3	5½	1½	..	½	14½	16½	9	..	..	5.56
New-York Ins.,	50.98	57.73	77	38	39	½	12	½	8	½	4½	2½	2½	13	18	13	..	..	3.60
North Salem,	50.39	57.44	84	36	48	½	5½	2½	9½	2	6½	..	4½	16	15	10	..	..	5.85
Oneida Conference,	44.20	53.99	79	28	51	...	...	1	6½	7	3	6	7½	10½	20½	15	..	..	4.25
Plattsburgh,	45.33	54.74	72	33	39	9½	1½	½	5	10	1½	½	2½	11	20	10	..	..	3.92
Rochester,	46.27	55.63	85	30	55	7	3½	1½	5	2	2	2½	7½	14	17	19	..	..	3.81
Springville,	50.19	56.55	79	30	49	2½	3½	3½	4½	..	4½	8½	4	14	17	10	..	..	....
Union Hall,	51.50	58.71	88	37	51	1½	5	4½	6½	7	4	1	1½	18½	12½	9	..	..	4.97

JUNE, 1849.

ACADEMIES.	THERMOMETER. Mean temperature 1st half.	THERMOMETER. Mean temperature 2d half.	Highest degree.	Lowest degree.	Range.	WINDS. [NO. OF DAYS.] North.	N. East.	East.	S. East.	South.	S. West.	West.	N. West.	WEATHER. [NO. OF DAYS.] Clear.	Cloudy.	Rain.	Snow.	Rain and snow.	Rain gage.
Albany,	62.99	72.27	92	49	43	½	3	..	6½	3	5½	4	7½	22½	7½	11	..	..	4.45
Amenia,	62.28	70.82	93	44	49	4½	4	..	4	3½	4½	2	7½	20	10	5	..	..	....
Auburn,	58.76	63.41	88	42	46	½	1	..	5½	4½	11	½	7	24½	5½	7	..	..	4.30
Cortland,	56.54	69.15	91	42	49	..	½	..	2½	2½	8½	..	16	20½	9½	11	..	..	....
Dutchess,	65.73	76.24	102	44	58	9	3	..	½	7½	9½	..	½	8	22	6	..	..	1.24
Erasmus Hall,	64.65	75.26	94	50	44	1	3	..	7½	6	4½	2½	5	21½	8½	5	..	..	.77
Fairfield,	59.53	68.34	90	36	54	..	...	½	11½	..	½	14	3½	19½	10½	7	..	..	3.73
Farmers' Hall,	60.26	69.23	96	42	54	..	6	½	3	6	8½	2	4	21½	8½	6	..	..	1.70
Granville,	64.60	72.21	97	46	51	10	2	..	1	5½	8	2	1½	21	9	9	..	..	2.21
Hamilton,	62.74	68.55	94	43	51	3	2½	..	½	7	2	1	14	18	12	12	..	..	4.40
Hartwick,	58.81	68.33	86	42	44	...	2	½	2	9	6	2½	8	19	11	6	..	..	4.17
Hudson,	63.66	72.76	94	48	46	17½	...	½	½	9½	½	..	1½	18	12	8	..	..	1.57
Kingston,	65.04	75.59	92	45	47	.	11	..	19	..	..	..	..	23½	6½	7	..	..	1.21
Lewiston,	63.73	72.94	90	46	44	1½	3½	1½	½	10	5½	5	2½	24½	5½	7	..	..	2.14
Mexico,	59.24	65.59	87	40	47	½	...	..	1½	3	½	24	½	26	4	5	..	..	.57
Newburgh,	67.21	80.09	102	51	51	9	2½	5	..	3½	1½	3½	5	23	7	5	..	..	1.42
New-York Ins.,	62.91	74.95	90	52	38	1½	4	1½	7½	1	4½	7	3	16½	13½	5	..	..	.66
North Salem,	62.69	70.77	93	41	52	1	1½	½	7½	3½	11	2	3	20	10	5	..	..	1.09
Oneida Conference,	59.66	66.54	87	41	46	..	1	..	3½	6	4½	10½	4½	18	12	12	..	..	5.64
Plattsburgh,	61.70	71.70	93	45	48	7	½	..	2½	14	..	2	4	21	9	8	..	..	1.64
Rochester,	61.21	79.81	93	42	51	2	4	½	2½	2½	3½	3½	11½	20½	9½	9	..	..	4.33
Springville,	62.90	68.20	84	40	44	3½	2½	½	2	2½	1	3½	14½	18½	11½	8	..	..	....
Union Hall,	62.28	70.50	97	51	46	2	1½	1	5	1½	8½	4½	6	26	4	4	..	..	.63

JULY, 1819.

ACADEMIES.	THERMOMETER. Mean temperature, 1st half.	THERMOMETER. Mean temperature, 2d half.	Highest degree.	Lowest degree.	Range.	WINDS. [NO. OF DAYS.] North.	N. East.	East.	S. East.	South.	S. West.	West.	N. West.	WEATHER. [NO. OF DAYS.] Clear.	Cloudy.	Rain.	Snow.	Rain and snow.	Rain gage.
Albany,	71.48	72.92	98	50	43	6	1	2	2½	12	..	3½	4	27½	3½	6	..	..	.70
Amenia,	68.60	70 09	96	59	37	9½	3½	1	..	9	5½	..	2½	22	9	5	..	..	....
Auburn,	60.54	70.84	98	46	47	5½	½	..	10	5	4½	½	5	27½	3½	6	..	..	.95
Cortland,	66.32	64.44	92	44	48	..	..	..	2½	4	6½	..	18	24	7	6	..	..	....
Dutchess,	75.31	77.64	106	56	50	7	3	..	2½	7½	9½	½	1	10½	20½	3	..	.	.49
Erasmus Hall,	72.77	73.06	96	53	43	2½	6	..	7½	6	5½	2	1½	21	10	4	..	..	2.15
Fairfield,	67.46	68.76	92	42	50	...	½	..	7	2	1	15½	5	26	0	2	..	..	.92
Farmers' Hall,	68.19	66.03	93	44	49	...	8½	1	3	2	11½	2½	2½	23½	7½	1	..	..	. 0
Granville,	71.41	72.56	102	48	54	10	..	..	1	4½	14	½	1	23½	7½	5	..	..	1.01
Hamilton,	68.51	69.75	94	47	47	2½	1½	..	1		7	..	14½	22½	8½	4	..	..	37
Hartwick,	68.36	68.83	86	44	42	...	2	..	1	15½	½	3	8½	25	6	4	..	..	.88
Hudson,	72.10	74.28	99	52	47	11½	..	1		12	1½	2½	2½	22	9	4	..	..	1.23
Kingston,	73.13	74.08	95	48	47	..	3½	..	24	..	½	..	3	26	5	4	..	..	.60
Lewiston,	70.93	70.83	89	54	35	1½	3	2	2½	5½	12	4	½	27½	3½	5	..	..	2.30
Mexico,	65.94	66.06	94	44	50	2½	..	½	6	2½	½	18	1	27½	3½	6	..	..	1.91
Newburgh,	77.61	76.85	105	52	53	3½	3½	2	..	12	2½	1½	2½	14	17	3	..	..	1.04
New-York Ins.,	72.06	73.72	92	56	36	1	6½	..	6½	½	7½	6½	2	17	14	4	..	..	2.56
North Salem,	69.35	70.49	95	44	51	1	3½	½	8½	4½	6	2½	4	24	7	5	..	..	1.32
Oneida Conference,	65.82	68.25	91	45	46	1	1	½	4½	6	6	5½	6½	22	9	7	..	..	.80
Plattsburgh,	70.80	72.61	100	52	48	1	½	..	7	12	½		8	25½	5½	1	..	..	.6
Rochester,	69.26	70.78	95	47	48	3	2½	..	2½	3½	6	4	8½	25	6	8	..	..	.4
Springville,	57.76	64.12	88	40	48	..	6½	½	6	1½	4	8	4½	23	8	7	..	..	....
Union Hall,	72.99	79.49	98	55	43	4	3	1	3½	9	7	1	2½	27	4	4	..	..	1.66

AUGUST, 1849.

ACADEMIES.	THERMOMETER.					WINDS. [NO. OF DAYS.]								WEATHER. [NO. OF DAYS.]					Rain gage.
	Mean temperature		Highest degree.	Lowest degree.	Range.	North.	N. East.	East.	S. East.	South.	S. West.	West.	N. West.	Clear.	Cloudy.	Rain.	Snow.	R in and snow.	
	1st half.	2d half.																	
Albany,	68.83	71.00	82	56	26	5	3	½	½	12½	4½	1½	3½	21½	9½	12	..	..	4.84
Amenia,	67.54	68.18	86	50	36	7	½	..	..	16½	6	..	½	0	1	6	..	..	....
Auburn,	71.41	70.93	88	52	36	..	½	..	9½	6	10	1½	3½	20	11	7	..	..	1.29
Cortland,	63.24	67.67	86	43	43	..	..	..	3	2½	8	..	17½	22	9	8	..	..	....
Dutchess,	72.56	72.76	95	16	79	5	4½	½	2½	6½	11	..	1	6½	24½	9	..	..	3.39
Erasmus Hall,	71.88	72.43	82	58	24	3	2½	..	9	3½	5½	3	5	22½	8½	8	..	..	3.98
Fairfield,	64.71	68.64	87	46	41	..	..	..	13	1	1	12½	3½	19½	11½	7	..	..	3.96
Farmers' Hall,	64.56	68.74	84	50	34	..	4	2	1	8½	9	1	5½	22	9	7	..	..	3.40
Granville,	69.11	70.84	90	50	40	10½	..	..	..	9	8½	1	2	21	10	8	..	..	5.44
Hamilton,	66.24	70.58	89	44	45	2	1	..	..	13	1	1	13	20	11	10	..	..	2.17
Hartwick,	65.49	69.58	82	43	39	..	½	..	2	16½	2	..	10	19	12	6	..	..	4.24
Hudson,	62.69	72.93	88	59	29	8	1½	3	2	11	1½	1	3	16	15	11	..	..	2.62
Kingston,	71.14	72.46	89	50	39	1½	3½	..	17½		1½	..	6½	23	8	5	..	..	4.70
Lewiston,	68.15	70.80	84	54	30	1½	½	..	1	5	13	7	3	25	6	7	..	..	1.97
Mexico,	63.20	67.89	86	45	41	..	..	½	5	4½	1	19½	½	22	9	11	..	..	1.66
Newburgh,	73.30	75.46	96	50	46	5½	3	2	..	15½	3	½	1½	17	14	6	..	..	5.10
New-York Ins.,	71.65	72.59	82	60	22	½	5	..	9½	½	3	6½	6	15	16	6	.	..	2.84
North Salem,	68.06	69.56	87	50	37	1	1	1	8½	8	5½	½	5½	16	15	9	..	..	7.24
Oneida Conference,	63.75	67.86	86	42	44	½	..	1½	4½	8½	3	10½	2½	16	15	10	..	..	4.67
Plattsburgh,	66.69	68.59	89	49	40	½	..	4	9	13½	½	3½	...	14½	16½	8	..	..	3.60
Rochester,	67.65	70.72	90	56	34	½	1	..	½	1½	3½	3	21	19	12	14	..	..	3.62
Springville,	63.80	63.29	84	44	40	5	..	..	..	2	8½	5½	10	11½	19½	14	..	..	....
Union Hall,	73.37	73.94	90	60	30	2½	4½	1½	1½	9½	3½	3½	5½	24	7	9	..	..	4.27

SEPTEMBER, 1849.

ACADEMIES.	THERMOMETER.					WINDS. [NO. OF DAYS.]								WEATHER. [NO. OF DAYS.]					Rain gage.
	Mean temperature 1st half.	Mean temperature 2d half.	Highest degree.	Lowest degree.	Range.	North.	N. East.	East.	S. East.	South.	S. West.	West.	N. West.	Clear.	Cloudy.	Rain.	Snow.	Rain and snow.	
Albany,	62.22	57.35	75	42	33	5½	½	..	½	13½	2½	3	4½	21½	8½	5	..	..	1.06
Amenia,	58.31	57.22	80	39	41	10	1	..	2½	7	4	1	4½	20	10	5	..	..	....
Auburn,	57.28	58.96	78	44	34	1	..	..	3½	5½	11	..	9	18	12	5	..	..	5.56
Cortland,	57.99	57.07	80	37	43	..	..	..	2	7	9½	..	11½	22	8	5	..	..	...
Dutchess,	65.69	62.55	89	10	79	5	5	1	2½	½	11½	2	2½	8½	21½	2	..	..	.93
Erasmus Hall,	65.33	64.12	84	51	33	2½	7½	1	4½	½	6	1½	6½	23	7	5	..	..	.98
Fairfield,	59.84	54.37	84	37	47	..	1	2½	10	½	1	10	5	20½	9½	6	..	..	1.83
Farmers' Hall,	59.04	57.84	79	38	41	½	8	1½	2	2	6½	2	7½	25	5	3	..	..	1.80
Granville,	60.16	55.75	84	36	48	10½	..	..	2½	4	10½	2	½	20	10	5	..	..	1.13
Hamilton,	60.55	59.20	84	32	52	..	1	..	..	12	1	..	16	19½	10½	8	..	..	1.48
Hartwick,	58.83	57.73	78	34	44	1	½	..	1	11½	4	3	9	19	11	2	..	..	.95
Hudson,	66.08	59.02	80	44	36	11	½	½	½	13	..	1	3½	19½	10½	5	..	..	.08
Kingston,	62.52	61.48	89	40	40	..	..	..	19½	..	..	..	10½	23½	6½	5	..	..	1.50
Lewiston,	63.77	61.33	82	40	42	2	1	4	1	4½	8½	5	4	21½	8½	5	..	..	1.93
Mexico,	56.53	56.97	80	32	48	½	..	..	2	5½	1½	20	½	22½	7½	8	..	..	2.71
Newburgh,	68.81	65.26	94	44	50	10	4	8	½	3	½	2½	1½	20½	9½	3	..	..	1.39
New-York Ins.,	64.13	62.15	88	50	38	4	5½	½	4	..	6	2	8	17	13	5	..	..	3.31
North Salem,	59.88	58.31	86	40	46	1½	3	4	5½	2½	5½	2	6	23	7	4	..	..	1.43
Oneida Conference,	57.59	55.52	81	33	48	..	1	..	2	5½	10	8½	3	19½	10½	8	..	..	2.53
Plattsburgh,	60.66	58.19	84	40	44	10½	1½	..	5	10	..	½	2½	18½	11½	6	..	..	2.46
Rochester,	61.27	59.14	82	40	42	2	3	..	..	1	10½	5	8½	20½	9½	11	..	..	3.91
Springville,	57.48	56.23	80	32	48	3	3½	2	1	5	4½	2	9	20	10	8	..	..	....
Union Hall,	70.60	64.17	86	52	34	3	5½	4½	3½	6	3½	1½	2½	24	6	7	..	..	.88

OCTOBER, 1849.

ACADEMIES.	THERMOMETER.					WINDS. [NO. OF DAYS.]								WEATHER. [NO. OF DAYS.]					Rain gage.
	Mean temperature		Highest degree.	Lowest degree.	Range.	North.	N. East.	East.	S. East.	South.	S. West.	West.	N. West.	Clear.	Cloudy.	Rain.	Snow.	Rain and snow.	
	1st half.	2d half.																	
Albany,	48.26	50.09	67	33	34	5	2	..	½	15	½	1	7	18½	12½	13	..	..	8.04
Amenia,	46.47	47.51	62	30	32	6	4	..	2	6½	7	1	4½	12	19	11	1	..	....
Auburn,	55.62	47.41	74	36	38	..	1½	..	4	1½	9½	..	14½	11	20	7	..	..	4.79
Cortland,	46.04	45.70	67	27	40	..	..	..	4	2½	10	..	14½	14½	16½	13	1	1	....
Dutchess,	49.55	52.27	72	32	40	9½	7½	1½	..	½	10	..	2	8	23	10	..	..	5.58
Erasmus Hall,	51.85	54.21	69	36	33	4½	7½	2	7	1	3	2½	3½	15½	15½	10	..	..	6.26
Fairfield,	43.79	45.90	64	26	38	..	1	7½	9½	..	½	6	6½	13	18	8	1	..	8.25
Farmers' Hall,	48.66	48.47	68	30	38	1	8	2½	½	4½	5	4	5½	15½	15½	10	..	..	6.70
Granville,	46.33	47.04	68	20	48	13	..	..	2	3½	10	1	1½	12½	18½	10	..	..	5.22
Hamilton,	46.16	48.56	75	24	51	..	1	..	1	9½	3	2	14½	13	18	13	..	..	6.52
Hartwick,	45.63	48.03	69	28	41	..	1	..	3	11	1	..	15	12	19	9	..	1	8.53
Hudson,	46.26	48.87	64	32	32	9	1	½	1	10½	½	1	7½	13½	17½	13	..	..	8.36
Kingston,	49.79	53.26	72	30	42	..	..	..	16½	..	..	..	14½	17	14	14	..	..	8.02
Lewiston,	51 03	50.59	75	31	44	½	3	4	2	½	14½	2½	4	17	14	9	..	..	3.67
Mexico,	45 57	45.43	64	26	38	½	1	3	3½	2½	½	20	..	14½	16½	11	1	..	6.28
Newburgh,	51.66	52.26	80	32	48	12	4½	1	2	5½	..	3½	2½	5½	25½	7	..	..	8.75
New-York Ins.,	50.34	52.64	66	33	33	1½	7	½	6	..	3½	5½	7	11½	19½	10	..	..	5.98
North Salem,	47.71	50.27	68	28	40	4½	2	4	5	4	4½	2	5	13½	17½	9	..	..	7.88
Oneida Conference,	43.52	45.71	68	24	44	½	1	..	6	5½	9½	4½	4	11	20	14	1	1	6.96
Plattsburgh,	48.33	49.07	69	30	39	12½	..	..	1	11	½	½	5½	17½	13½	6	1	..	5.49
Rochester,	47.71	48.77	72	32	40	6	1½	1½	1	3½	6½	3½	7½	14	17	17	1	1	4.17
Springville,	49.09	47.56	68	26	42	1½	1	2½	4	½	8	4	9½	11	20	12	2	..	....
Union Hall,	52.86	49.68	71	38	33	3½	7	1	2	2½	6½	5	3½	19	12	10	..	..	6.45

NOVEMBER, 1849

ACADEMIES.	THERMOMETER.					WINDS. [NO. OF DAYS.]								WEATHER. [NO. OF DAYS.]					Rain gauge.
	Mean temperature 1st half.	Mean temperature 2d half.	Highest degree.	Lowest degree.	Range.	North.	N. East.	East.	S. East.	South.	S. West.	West.	N. West.	Clear.	Cloudy.	Rain.	Snow.	Rain and snow.	
Albany,	48.53	43.82	62	27	35	1	5	½	3	4	5	1	10½	17½	12½	7	..	..	4.81
Amenia,	46.59	43.72	64	22	42	8	3	1	8	3	6½	2	3½	13½	16½	6	1	..	....
Auburn,	43.84	42.22	54	34	20	4	2½	..	2	1	4½	2	14	11½	18½	5	1	1	4.73
Cortland,	47.65	42.44	64	27	37	..	..	..	4	4½	11½	..	10	11	19	10	2	..	....
Dutchess,	49.31	44.69	70	22	48	10	4½	..	3½	1	6½	2	2½	6	24	8	..	..	3.33
Erasmus Hall,	52.67	47.91	70	31	39	2	6	½	4	1	5½	4½	6½	16½	13½	7	..	..	1.88
Fairfield,	44.36	39.50	58	23	35	½	2	5½	7	..	1	10½	3½	10	20	11	4	..	4.22
Farmers' Hall,	47.24	43.69	66	20	46	1	10	..	1½	1½	2½	8	5½	15½	14½	5	..	..	1.20
Granville,	46.19	40.82	60	20	40	13	1	1	½	5½	8	1	..	8½	21½	6	..	..	2.63
Hamilton,	48.36	42.70	70	20	50	2	1	..	1	9	2½	..	14½	10½	19½	11	3	..	2.02
Hartwick,	46.40	42.22	69	18	51	..	2	1	3	10	2	½	11½	10	20	8	1	..	3 02
Hudson.	46.79	42.22	68	24	34	10	2	1½	1	7½	3½	½	4	13½	16½	9	1	..	4.15
Kingston,	50.70	49.68	70	20	50	..	1½	..	11	..	1	..	16½	20	10	5	..	..	5.27
Lewiston,	51.08	45.29	73	30	43	1	5½	1½	1	7	8½	2½	8	17	13	8	1	..	3.83
Mexico,	46.57	40.96	66	26	40	1	..	4	4	3	..	18	..	12	18	10	3	..	4.02
Newburgh,	48.44	42.26	69	23	46	7	3½	8½	3	1	2½	2½	2	13	17	4	..	..	2.18
New-York Ins.,	49.78	46.25	69	30	39	1	3½	..	5½	..	2	11	7	12½	17½	8	..	..	2.57
North Salem,	47.75	43.32	68	20	48	1	2½	2½	4½	3	9	1½	6	16	14	4	..	..	4.42
Oneida Conference,	45.62	37 79	61	21	40	..	½	..	6	8	7½	1½	6½	10	20	10	1	..	2.67
Plattsburgh,	47.38	43.62	69	28	43	14	..	..	10	..	..	2	4	21½	8½	5	..	..	2.45
Rochester,	49 99	43.33	67	27	40	½	3½	½	1	2½	8½	6½	7	11	19	15	5	..	3.31
Springville,	48.15	43.58	66	26	40	..	½	1½	2	½	11	6	8½	10	20	12	4	..	....
Union Hall,	51.88	40.00	67	23	44	4½	1½	3	1½	3½	1½	10	4½	20½	9½	5	..	..	2.16

DECEMBER, 1849.

ACADEMIES.	THERMOMETER.					WINDS. [NO. OF DAYS.]								WEATHER. [NO. OF DAYS.]					Rain gage.
	Mean temperature		Highest degree.	Lowest degree.	Range.	North.	N. East.	East.	S. East.	South.	S. West.	West.	N. West.	Clear.	Cloudy.	Rain.	Snow.	Rain and snow.	
	1st half.	2d half.																	
Albany,	29.86	27.97	43	5	38	5	3½	½	1	8½	..	2½	10	8	23	5	6	3	2.11
Amenia,	29.43	27.05	46	1	45	7½	5½	..	4	4½	5½	1	3	11½	19½	3	6	5	....
Auburn,	35.49	27.00	46	6	40	7½	6½	..	..	1	1½	1½	13	3	28	5	2	..	3.41
Cortland,	28.69	25.25	41	1	40	..	½	..	2	2½	9½	..	16½	1½	29½	5	12	3	....
Dutchess,	30.40	27.98	42	2	40	8	1½	..	1	1½	10	1	8	9	22	2	6	2	1.91
Erasmus Hall,	35.37	33.97	50	9	41	1	6	..	1	2	3	4½	13½	14	17	7	3	1	4.03
Fairfield,	22.78	21.30	39	— 6	45	..	2	2	8	½	..	10½	8	3	28	2	17	1	2.60
Farmers' Hall,	30.47	29.42	45	1	44	1½	5½	..	½	..	7½	6	10	11	20	5	3	..	1.80
Granville,	26.77	24.98	44	—14	58	10	1½	½	1½	5	10	1½	1	11	20	4	8	1	2.85
Hamilton,	28.48	23.90	42	2	40	1	2	..	1	8½	2½	2	14	3	28	2	18	2	2.37
Hartwick,	28.32	26.01	43	7	36	..	3	..	1	13	..	½	13½	3½	27½	3	5	3	1.54
Hudson,	28.34	26.74	44	4	40	9½	..	½	..	9	2½	2½	7	10	21	4	4	3	1.01
Kingston,	34.30	33.49	50	10	40	1	14½	..	6½	..	2	..	7	18½	12½	3	7	..	2.77
Lewiston,	31.27	27.37	48	6	42	1	1	2½	5½	3	11½	5½	1	9	22	5	2	2	1.16
Mexico,	25.60	22.46	38	0	38	1½	½	1½	4½	1	..	19½	2½	4	27	4	10	2	2.91
Newburgh,	30.46	22.94	47	0	47	13	9½	2	1½	2	½	1	2	11	20	1	2	1	2.35
New-York Ins.,	33.17	32.39	50	9	41	..	7½	..	½	..	5½	4½	13	7½	23½	7	4	1	4.62
North Salem,	30.28	29.28	49	4	45	2½	3½	1	4½	3½	5½	6	4½	12½	18½	4	4	3	3.24
Oneida Conference,	23.85	20.77	43	— 4	47	½	..	..	5½	4	9½	8½	3	1	30	8	18	2	3.15
Plattsburgh,	25.04	24.59	38	— 8	46	12½	2	..	½	3½	1	3	8½	8	23	2	9	..	3.17
Rochester,	29.18	26.91	47	2	45	1½	2½	..	3½	3	3	8½	9	1	30	4	16	3	2.31
Springville,	30.64	27.02	47	4	43	1	½	2½	2½	2	7½	8	7	2	29	3	16	6	....
Union Hall,	26.46	18.19	37	4	33	2	4½	4½	2½	1½	2	9	5	24	7	4	3	..	3.03

RECAPITULATION AND RESULTS, No. 1.

ACADEMIES.	MEAN TEMPERATURE IN EACH MONTH.												Annual Mean.	Highest degree during the year.	Lowest degree during the year.	Annual range.	Greatest monthly range.	Coldest day in the year.	Warmest day in the year.	First frost in autumn.	First fall of snow.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.									
Albany, ...	20.83	20.82	36.90	44.12	57.10	67.63	72.20	69.91	59.78	49.18	46.19	28.91	47.80	93	—10	103	56	Jan. 11	July 13	Oct. 2	Oct. 31
Amenia, ...	22.15	20.12	35.77	41.48	56.87	66.55	69.37	67.87	57.86	47.00	45.15	28.20	46.73	96	—16	112	62	Feb. 16	" 13	" 9	" 30
Auburn, ...	20.57	19.26	32.43	38.90	16.92	60.08	55.44	71.17	58.12	51.51	43.22	31.24	44.64	93	— 6	99	52	" 16	" 12	" 27	Nov. 10
Cortland, ...	20.32	19.71	33.71	41.98	50.69	62.87	65.38	65.45	57.53	45.87	45.04	26.97	44.63	92	—10	102	58	" 15	" 13	Sept. 3	Oct. 30
Dutchess, ...	23.44	20.93	37.61	46.16	56.64	70.99	76.48	72.67	64.12	50.91	47.00	29.19	49.68	102	—10	112	79	Jan. 11	" 13	" 10	Dec. 8
Erasmus Hall, ...	28.14	26.52	40.03	47.90	55.91	68.85	72.91	72.15	64.72	53.03	50.29	34.67	51.26	96	1	96	56	" 11	" 13	Oct. 9	" 2
Fairfield, ...	14.57	15.84	31.12	38.22	49.12	63.94	68.11	66.68	57.11	44.85	41.93	22.04	42.79	92	—18	110	63	" 11	" 13	" 2	Oct. 7
Farmers' Hall, ...	23.26	21.71	36.19	43.85	54.23	64.74	67.11	66.65	58.44	48.56	45.46	29.94	46.68	96	—17	113	69	" 11	" 13	" 9	Dec. 11
Granville, ...	15.12	16.53	33.99	41.53	54.44	68.41	72.00	69.97	56.96	46.68	43.47	25.87	45.50	102	—24	126	72	" 11	" 13	" 2	" 5
Hamilton, ...	19.89	21.90	34.41	42.11	53.07	65.64	69.14	67.91	59.88	47.36	45.78	26.16	46.10	94	—18	112	66	" 11	" 12	Sept. 2	Oct. 7
Hartwick, ...	20.24	19.75	34.35	41.93	51.76	63.57	68.59	67.03	58.28	46.83	44.31	27.16	45.31	86	—20	106	70	" 11	" 13	" 3	" 7
Hudson, ...	20.15	19.12	35.24	43.00	54.59	68.21	73.23	67.97	62.55	47.60	44.50	27.55	46.97	99	—11	110	64	" 11	" 13	Oct. 9	Nov. 28
Kingston, ...	25.61	23.33	40.17	49.27	58.10	70.37	73.60	71.79	62.00	51.52	50.29	33.89	50.74	95	—18	113	64	Feb. 18	" 13	....	Dec. 2
Lewiston, ...	24.43	25.24	36.47	43.20	53.64	68.34	70.88	69.52	62.55	50.80	48.19	29.26	48.53	90	— 4	94	64	" 15	" 12	Oct. 8	Nov. 28
Mexico, ...	16.85	17.99	30.91	39.00	48.06	62.41	66.00	65.54	56.75	45.50	43.76	24.03	43.06	94	—24	118	70	Jan. 10	" 10	Sep. 19	Oct. 31
Newburgh, ...	24.43	22.95	37.06	45.91	57.67	74.15	77.23	74.38	67.03	51.96	45.35	26.70	50.40	105	—11	116	61	" 11	" 12	Oct 15	Dec. 3
New-York Ins., ...	26.08	24.36	38.05	45.81	54.37	68.93	73.21	72.13	63.14	51.53	48.02	32.77	49.86	92	— 2	94	61	" 11	" 13	" 15	" 2
North Salem, ...	22.95	20.94	37.07	45.03	53.97	66.73	69.92	68.81	59.10	48.99	45.54	29.78	47.40	95	—15	110	67	Feb. 19	" 13	" 9	" 2
Oneida Conference, ...	16.60	16.72	30.41	38.88	49.09	63.10	67.03	65.80	56.55	44.61	41.73	22.31	42.73	90	—17	107	69	Jan. 10	" 12	Sept. 19	Oct. 31
Plattsburgh, ...	17.23	16.51	34.54	39.62	50.03	66.70	71.70	67.64	59.42	48.70	55.50	24.81	45.20	100	—20	120	68	Feb. 17	" 13	Oct. 9	" 31
Rochester, ...	23.14	22.13	34.57	41.85	51.10	66.01	70.05	69.23	60.20	48.26	46.66	28.01	48.68	96	— 9	104	56	" 16	" 10	"	" 30
Springville, ...	21.69	24.11	34.43	43.49	53.37	65.55	60.94	63.54	56.85	48.32	45.86	28.83	45.58	88	—20	108	71	Jan. 11	" 13	Sept. 1	" 30
Union Hall, ...	25.47	22.65	38.35	46.75	55.10	66.39	76.24	73.65	68.38	51.27	45.93	32.32	50.12	98	— 7	105	65	" 11	June 21	" 2	Dec. 9

Mean temperature for the whole State, ... 46.89

RECAPITULATION AND RESULTS, No. 2.

ACADEMIES.	Prevailing winds in each month.												Annual Results of Winds. (No. of days.)								Prevailing Winds.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	North.	N East.	East.	S. East.	South.	S. West.	West.	N. West.	
Albany,	NW	NW	NW	NW	NW	NW	S	S	S	S	NW	NW	40	23	5½	21	105½	21	38	111	Northwest.
Amenia,	NS&NW	NW	NW	NW	NE	NW	N	S	N	SW	N	N	64½	36½	5½	30½	77½	51	15	77½	South & NW.
Auburn,	NW	N	NW	NW	SW	SW	SE	SW	SW	NW	NW	NW	38	16	0	42½	38	94½	8½	127½	Northwest.
Cortland,	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	SW	NW	0	1	0	43	42½	101½	0	177	Northwest.
Dutchess,	N	NE	NE	N	N	SW	SW	SW	SW	SW	N	SW	94½	63	6	15½	47	93½	12	31½	North.
Erasmus Hall,	NW	NW	NW	NW	NE	SE	SE	SE	NE	NE	NW	NW	27½	60½	0	54½	32½	52	31½	89½	Northwest.
Fairfield,	W	SE	SE	NW	W	W	W	SE	W	SE	W	W	1½	9	32½	114½	6½	9½	120½	71	West.
Farmers' Hall,	NW	NE	NE	NW	NE	SW	SW	SW	NE	NE	NE	NW	8½	94	13½	18½	30	62	45½	73	Northeast.
Granville,	SW	N	N	N	N	N	SW	N	N	N	N	SW	145½	6	5	14½	49	106½	18½	20	North.
Hamilton,	NW	NW	NW	NW	NW	NW	NW	SW	NW	NW	NW	NW	19½	12	3½	11	100½	25	10½	171	Northwest.
Hartwick,	NW	NW	NW	NW	NW	S	S	S	S	NW	NW	NW	3	18½	3	21½	133½	29	15	141½	Northwest.
Hudson,	NW	N	NW	S&NW	N	N	S	S	S	S	N	N	120	12½	11½	15½	112	17	10	66½	North.
Kingston,	SE	NE	NW	NE	SE	SE	SE	SE	SE	SE	NW	NE	7½	86½	0	150½	½	21½	0	92½	Southeast.
Lewiston,	SW	SW	SW	SW	W	S	SW	SW	SW	SW	SW	SW	18	28½	36½	24	52	107½	63½	33	Southwest.
Mexico,	W&NW	SE	W	W	W	W	W	W	W	W	W	W	18	2½	14	67	33½	5	199	26	West.
Newburgh,	N	N	NE	N	N&E	N	S	S	N	N	E	N	101½	59	42½	15	62½	2[illegible]½	35½	2[illegible]½	North.
New York Ins.	NW	NW	NE	NW	NE	SE	SW	SE	NW	NW	W	NW	13½	76½	4½	58	4½	55	60	93	Northwest.
North Salem,	NW	NE	NW	NW	SE	SW	SE	SE	NW	SE&NW	SW	W	23	35½	18½	74	47½	62	28	76½	Northwest.
Oneida Conference	SW	S	W	W	NW	W	NW	W	SW	SW	S	SW	3½	5½	3½	49½	[illegible]	87½	67½	47½	SW & West.
Plattsburgh,	N	N	N	NW	S	S	S	S	N	N	N	N	105	10	4½	47	107½	6½	18	66½	South.
Rochester,	NW	NB	NW	NW	NW	NW	NW	NW	SW	NW	SW	NW	13	26½	7	25½	22	59	55½	120½	Northwest.
Springville,	W	W	NE	W	W	NW	W	NW	NW	NW	SW	W	28½	27½	16½	32	23	67	82	88½	Northwest.
Union Hall,	NW	NW	NE&NW	NW	S	SW	S	S	S	NE	W	W	29	49½	24½	36	44	61	42	79	Northwest.

Prevailing Wind for the whole State,.. Northwest.

RECAPITULATION AND RESULTS, No. 3.

ACADEMIES.	WEATHER. [No. OF DAYS.]					RAIN GAGE FOR EACH MONTH.												Total fall of rain and snow.	Driest month in the year.	Wettest month in the year.
	Clear.	Cloudy.	Rain.	Snow.	Rain and snow.	January.	February.	March.	April	May.	June.	July.	August.	September.	October.	November.	December.			
Albany,...............	217½	147½	83	17	8	.76	1.25	2.86	.75	5.40	4.45	.70	4.83	1.06	8.04	4.51	2.11	36.72	July, ...	October,
Amenia, ...	189½	175½	65	21	7	....	....	....	....	....	....	....	....	....	....	....	....	.....	....	
Auburn, ...	166½	198½	64	13	5	4.38	2.52	3.78	.70	4.30	4.30	.95	1.29	5.66	4.79	4.73	3.41	40.71	April, ...	September,
•Cortland, ...	182	183	92	49	6	....	....	....	....	....	....	....	....	....	....	....	....	.....	....	
Dutchess,.............	80½	284½	66	15	5	.45	1.42	2.71	.96	6.36	1.24	.49	3.39	.83	5.58	3.33	1.91	28.67	January,.....	May.
Erasmus Hall, ...	224	141	77	11	6	.55	2.23	5.07	.80	3.76	.77	2.15	3.99	.98	8.26	1.88	4.03	32.47	"	October.
•Fairfield, ...	181	184	70	45	6	3.09	1.86	1.85	2.62	2.80	3.73	.92	2.95	1.83	8 25	4.22	2.60	37.72	July,.........	"
Farmers' Hall,........	221	144	66	13	0	.90	1.90	2.40	1.00	4.65	1.70	.70	3.40	1.80	6.70	1.20	1.80	28.15	"	"
•Granville, ...	193	172	67	20	3	.80	1.08	2.04	1.02	3.5[illegible]	2.21	1.01	5.44	1.13	5.22	2.63	2.85	28.96	January,.....	August.
Hamilton, ...	163½	201½	93	48	7	1.18	.65	1.32	1.47	3.23	4.40	.37	2.17	1.48	6.52	2.02	2.37	27.18	July, ...	October.
•Hartwick, ...	176	189	54	17	7	.75	.94	1.01	•	1.92	4.17	.86	4.25	.95	8.53	3.02	1.54	•	....	"
•Hudson...............	186	179	84	16	4	.73	.62	3.25	1.18	4.74	1.57	1.23	2.62	.08	8.36	4.15	1.01	29.54	September, ..	"
•Kingston,..	253½	111½	75	18	0	2.65	1.55	2.08	2.15	4.98	1.21	.60	4.70	1.50	8.02	5.27	2.77	37.48	July, ...	"
Lewiston,............	216	149	82	16	4	2.00	1.10	2.64	1.76	2.42	2.14	2.30	1.97	1.93	3.67	3.83	1.16	26.82	February,....	November.
Mexico, ...	215	150	81	34	5	.64	.47	1.27	1.04	2.23	.67	1.91	1.66	2.71	6.28	4.02	2.91	25.71	"	October.
Newburgh, ...	175	190	49	15	1	.52	1.56	3.16	.79	5.56	1.42	1.04	5.10	1.39	8.75	2.18	2.35	33.82	January,.....	"
•New-York Ins.,.......	161	204	83	17	5	.65	2.60	5.19	1.05	3.60	.66	2.56	2.84	3.31	5.98	2.57	4.62	35.63	"	"
North Salem, ...	212	153	67	16	6	1.55	2.09	5.19	1.35	5.85	1.09	1.32	7.24	1.43	7.88	4.42	3.24	42.65	June, ...	"
Oneida Conference,...	148½	216½	106	51	7	1.99	.89	2.66	1.99	4.25	5.64	.80	4.67	2.53	6.96	2.67	3.15	38.20	July, ...	"
•Plattsburgh, ...	189	176	62	41	0	2.30	2.59	3.69	2.76	3.92	1.64	.95	3.60	2.46	5.49	2.45	3.17	35.02	"	"
Rochester, ...	162	203	119	69	14	1.39	1.29	2.35	1.44	3.81	4.33	.94	3.62	3.91	4.17	3.31	2.31	32.87	"	June.
Springville,..........	159½	205½	101	59	11	....	....	....	....	....	....	....	....	....	....	....	....	.....	....	
•Union Hall,..........	254	111	73	14	3	.10	1.61	3.69	.67	4.97	.63	1.66	4.27	.88	6.41	2.16	3.03	30.08	January,.....	October.

General mean, or average quantity of rain for the whole State,.................................... 33.07

• In the reports from these Academies, the number of days on which rain, snow, &c., fell, was erroneously computed by adding up the *number of half days* on which they fell. (See Instructions to Academies, page 51.) These reports consequently required correction.

RECAPITULATION AND RESULTS, No. 4:

COMPARISON OF THE WARMEST AND COLDEST DAY IN EACH MONTH.

ACADEMIES.	January		Febr'y.		March.		April.		May.		June.		July.		August.		Sept'br.		October.		Nov'br.		Dec'br.	
	Warmest.	Coldest.	Warmest.	Coldest.	Warmest.	Coldest.	Warmest.	Coldest.	Warmest.	Coldest.	Warmest.	Coldest	Warmest.	Coldest,	Warmest.	Coldest	Warmest.	Coldest.	Warmest.	Coldest.	Warmest.	Coldest.	Warmest.	Coldest.
Albany,	25	11	28	18	31	3	7	14	22	5	22	10	13	2	30	31	6	27	17	31	8	1	20	25
Amenia,	14	11	28	16	31	4	3	14	21	6	22	10	13	3	28	15	17	19	29	31	5	1	15	25
Auburn,	23	10	23	16	26	4	7	14	31	7	20	5	12	1	6	31	23	8	13	21	1	29	3	28
Cortland,	25	10	26	16	20	4	30	14	21	2	22	5	13	2	20	31	16	8	16	31	6	1	20	25
Dutchess,	26	11	28	18	31	3	25	15	21	6	22	12	13	2	5	31	17	27	16	31	5	1	20	25
Erasmus Hall,	26	11	24	16	31	4	8	15	23	6	22	11	13	2	29	1	17	27	17	31	4	1	20	25
Fairfield,	26	11	25	13	29	4	30	15	21	2	22	11	13	15	27	2	16	23	29	31	4	2	20	26
Farmers' Hall,	14	11	28	16	30	4	4	15	22	6	22	8	13	21	5	1	17	10	17	31	4	1	20	26
Granville,	25	11	26	19	21	3	30	14	28	5	22	8	13	2	30	24	6	19	29	31	8	16	16	25
Hamilton,	25	11	28	15	29	4	4	14	22	2	22	5	12	2	28	31	16	27	27	31	7	1	20	25
Hartwick,	26	11	28	19	31	4	4	15	22	6	22	6	13	2	28	15	16	2	28	31	7	1	20	26
Hudson,	26	11	26	19	31	4	4	15	21	3	22	11	13	3	4	31	6	19	29	9	4	2	1	26
Kingston,	25	11	26	18	30	4	7	15	21	6	22	10	13	15	5	16	16	30	29	31	8	1	6	26
Lewiston,	25	10	28	15	20	3	7	15	21	5	21	5	12	15	19	31	16	23	28	31	5	28	20	25
Mexico,	25	10	26	19	29	4	4	15	22	2	20	5	10	15	20	1	16	19	16	31	8	29	16	25
Newburgh,	24	11	28	18	13	2	4	16	21	5	20	11	12	2	2	12	6	12	17	31	5	1	16	25
New-York Ins.,	26	11	24	18	31	3	8	15	23	7	22	10	13	4	30	1	17	27	22	31	4	2	20	25
North Salem,	14	11	24	19	31	4	4	15	21	6	22	12	13	15	5	15	17	24	16	13	5	1	20	25
Oneida Conference,	25	10	28	15	20	3	4	15	21	5	20	8	12	1	19	31	16	8	28	31	6	1	20	25
Plattsburgh,	25	19	28	17	31	5	4	16	25	5	22	13	13	2	21	15	7	19	31	18	7	30	15	25
Rochester,	25	11	28	16	20	3	4	14	22	5	22	5	10	2	20	15	16	8	28	31	7	29	19	25
Springville,	23	11	28	16	20	3	30	14	21	2	22	5	13	2	27	31	16	8	12	31	5	29	20	25
Union Hall,	26	11	28	16	29	9	4	15	28	7	21	14	13	2	31	29	3	29	17	27	1	29	1	25

RECAPITULATION AND RESULTS, No. 5.

COMPARISON OF THE RANGE IN EACH MONTH.

ACADEMIES.	January.		Febr'y.		March.		April.		May.		June.		July.		August.		Sept'br.		Oct'br.		Nov'br.		Dec'br.	
	Highest.	Lowest.	Highest.	Lowest.	Highest.	Lowest.	Highest.	Lowest.	Highest.	Lowest.	Highest.	Lowest.	Highest.	Lowest.	Highest.	Lowest.	Highest.	Lowest.	Highest.	Lowest.	Highest.	Lowest.	Highest.	Lowest.
Albany,	46	—10	46	— 7	64	15	67	24	79	35	92	49	93	50	82	56	75	42	67	33	62	27	43	5
Amenia,	48	— 8	46	—16	57	8	69	19	80	34	93	41	96	59	86	50	80	39	62	30	64	22	46	1
Auburn,	48	— 4	42	— 6	48	10	70	18	74	34	84	42	93	46	88	52	78	44	74	23	54	34	46	6
Cortland,	46	— 4	48	—10	58	6	65	18	80	32	91	42	92	44	86	43	80	37	67	36	64	27	41	1
Dutchess,	53	— 8	48	—10	66	12	70	25	86	36	102	44	101	55	95	16	89	10	72	37	70	22	42	2
Erasmus Hall,	57	1	46	3	68	23	66	25	82	38	94	50	96	53	82	58	84	51	69	22	70	31	50	9
Fairfield,	45	—18	47	—12	60	6	64	14	78	26	90	36	92	42	87	46	84	37	64	36	58	23	39	— 6
Farmers' Hall,	52	—17	52	—16	62	6	68	20	79	34	96	42	93	44	84	50	79	38	68	86	66	20	45	1
Granville,	48	—22	8	—21	60	6	70	20	83	32	97	46	102	48	90	50	84	36	68	20	60	20	44	—14
Hamilton,	44	—15	48	—18	62	5	72	20	85	27	91	43	94	47	89	44	84	32	75	24	70	20	42	2
Hartwick,	50	—20	48	—19	58	7	68	17	83	31	86	42	86	44	82	43	78	34	69	29	69	18	43	7
Hudson,	53	—11	45	— 0	56	14	67	20	84	34	94	48	99	52	88	59	80	44	64	32	58	21	44	4
Kingston,	50	— 8	46	—18	60	10	70	28	86	40	92	45	95	48	89	50	80	40	72	30	70	20	50	10
Lewiston,	50	2	60	— 4	59	16	71	24	78	32	90	46	89	54	81	54	82	40	75	31	73	30	48	6
Mexico,	40	—10	46	—21	48	10	68	22	84	30	87	40	94	44	86	45	80	32	64	26	66	26	38	0
Newburgh,	51	—10	44	—11	61	10	69	26	90	38	102	51	105	52	96	50	94	44	80	32	69	23	47	0
New-York Ins.,	49	— 2	41	2	55	22	62	24	77	38	90	52	92	56	82	60	88	50	66	33	69	30	50	9
North Salem,	52	— 4	52	—15	62	13	68	24	84	36	93	41	95	44	87	50	86	40	68	28	68	20	49	4
Oneida Conference,	44	—12	42	—17	54	3	69	17	79	28	87	41	90	45	86	42	81	33	68	24	61	21	43	— 4
Plattsburgh,	52	—13	48	—27	54	9	62	24	72	33	93	45	100	52	89	49	84	40	69	30	61	26	38	— 8
Rochester,	47	— 9	48	— 7	54	12	74	20	85	30	93	42	95	47	90	56	82	40	72	32	67	27	47	2
Springville,	49	—20	60	—11	55	10	74	22	79	30	84	40	88	40	84	44	80	32	68	26	66	26	47	4
Union Hall,	58	— 7	43	— 5	71	20	71	23	88	37	97	51	98	55	90	60	86	52	71	38	67	23	37	4

GENERAL SUMMARY.

ACADEMIES.	Mean Temperture.		Prevailing Winds.		Averagequantity of rain.	
	years.		years.		years.	
Albany,	24	48.43	24	S	24	40.92
Auburn,	22	46.62	22	NW	21	34.56
Cayuga,	12	48.69	13	S	..	.....
Cherry Valley,	16	44.15	15	W	11	40.83
Clinton,	17	48.74	17	NW	16	38.59
Cortland,	17	44.54	17	NW	..	.....
Dutchess,	17	51.08	17	N	14	38.13
Erasmus Hall	24	51.61	24	NW	24	42.76
Fairfield,	19	43.26	20	W & NW	17	36.60
Farmers' Hall,	13	47.35	13	SW	..	.....
Franklin, (Prattsburgh.)	..	.....	13	NW	..	.....
Fredonia,	18	48.55	18	W	17	36.51
Gouverneur,	13	43.66	13	SW	..	.....
Granville,	14	45.39	15	N	15	31.07
Hamilton,	18	45.00	20	NW	18	34.51
Hartwick,	16	46.19	16	S	14	37.09
Hudson,	17	48.31	18	S	17	36.19
Ithaca,	17	48.38	16	NW	13	30.78
Johnstown,	14	44.95	16	W	14	39.89
Kinderhook,	17	46.51	17	N	17	36.40
Kingston,	19	49.38	20	NE	19	37.53
Lansingburgh,	20	47.97	20	S	20	34.01
Lewiston,	18	48.16	18	SW	12	22.41
Lowville,	20	43.74	19	S	18	32.46
Mexico,	12	44.04	12	W	12	31.49
Middlebury,	19	46.77	19	SW	17	30.47
Montgomery,	14	48.54	14	W & NW	14	34.95
Mount Pleasant,	13	49.23	13	NW	12	36.19
Newburgh,	20	49.67	19	SW	18	35.55
North Salem,	18	48.07	18	NW	17	40.53
Oneida Conference,	20	43.54	19	NW	20	38.34
Onondaga,	16	47.18	16	W	16	31.40
Oxford,	17	45.06	18	W	18	35.95
Pompey,	17	42.84	17	NW	15	29.46
Redhook,	12	48.36	12	S	..	.....
Rochester,	18	46.78	18	NW	17	31.20
St. Lawrence,	21	48.61	22	SW	19	28.05
Union Hall,	24	49.82	24	NW	24	38.83
Utica,	23	45.68	22	W	19	40.57

SUPPLEMENTARY OBSERVATIONS.

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1. PROGRESS OF VEGETATION, &c.

First Thunder Storm.—March 21; this afternoon at 3 o'clock, there was loud thunder for some time, with wind, accompanied with a fall of snow, sufficient to cover the earth, Cortland; March 21, Erasmus Hall; March 28, Fairfield; March 21, Rochester.

Chickweed in blossom.—March 21, Rochester.

Alnus Rubra in blossom.—March 24, Rochester.

Ploughing commenced.—March 30, Cortland; March 12, Erasmus Hall; March 10, Union Hall; April 6, North Salem.

Skunk Cabbage in blossom.—March 24, Rochester; March 24, North Salem.

Daphne Mezereon in blossom.—March 31, Erasmus Hall.

Epigæa Repens in flower.—April 1, Rochester.

Violets in flower.—April 3, Albany; April 11; North Salem.

White Maple in flower.—May 19, Hamilton.

Red Maple in flower.—April 5, Albany; March 27, Rochester.

Soft Maple in flower.—April 9, North Salem.

Silver Maple in flower.—April 5, Albany.

Sugar Maple in flower.—May 3, North Salem.

Elm in flower.—April 5, Albany; April 5, Rochester; April 18, North Salem.

Hepatica Triloba in flower.—April 5, Cortland; April 9, Rochester; April 4, North Salem.

Claytonia Virginica, (Spring beauty,) *in flower*.—April 5, Cortland; April 11, Rochester.

Shad Bush in blossom.—May 2, Auburn: May 9, Cortland; May 19, Hamilton; May 8, Rochester; April 29, North Salem.

Shepherd's Purse in blossom.—April 19, Rochester; April 12, North Salem.

Polyanthus in blossom.—April 21, Hamilton.

Apricots in blossom.—May 2, Auburn; April 13, Erasmus Hall May 1, Lewiston; April 28, Rochester.

Asparagus.—May 18, Hamilton.

Daffodil in blossom.—April 20, Cortland; April 5, Erasmus Hall; May 21, Fairfield; April 7, Hamilton; April 8, Rochester; April 14, North Salem.

Hyacinth in flower.—April 20, Cortland.

Laurus Benzoin in flower.—April 16, North Salem.

Dog-tooth Violet in flower.—April 24, Cortland.

Cowslip in blossom.—May 9, Hamilton ; April 22, North Salem.

Blood Root in flower.—April 25, Cortland ; April 10, North Salem.

Dandelion in flower.—May 9, Cortland; April 24, Erasmus Hall; May 20, Fairfield; May 2, Hamilton; May 15, Oxford; May 1, Rochester; April 12, North Salem.

Currants in flower.—May 10, Cortland; April 30, Erasmus Hall; May 18, Hamilton; May 13, Cazenovia; May 11, Oxford; May 11, Rochester; May 3, North Salem.

Veronica in flower.—May 1, Rochester.

Corn Planting commenced.—May 11, Cortland.

Crown Imperial in flower.—May 3, Rochester.

Trillium in flower.—May 11, Cortland; May 9, Rochester; April 27, North Salem.

Cherry in flower.—May 16, Cortland; May 1, Erasmus Hall; May 25, Fairfield; May 12, Mount Pleasant; May 21, Cazenovia; May 21, Oxford; May 10, Rochester; May 7, North Salem.

Strawberries in flower.—May 17, Cortland; May 1, Erasmus Hall; May 21, Lewiston; May 15, Rochester; May 9, North Salem.

Plum in flower.—May 20, Cortland; May 2, Erasmus Hall; May 25, Fairfield; May 21, Hamilton; May 21, Lowville; May 11, Oxford; May 16, Rochester; May 18, Springville; May 5, North Salem.

Tulip in flower.—May 22, Cortland; May 20, Rochester.

Quinces in blossom—May 19, Erasmus Hall.

Hopplebush in flower.—May 22, Cortland.

Geranium in flower.—May 16, Rochester.

Pear in flower.—May 22, Cortland; May 3, Erasmus Hall; May 25, Fairfield; May 21, Rochester; May 16, North Salem.

Apple in flower.—May 23, Cortland; May 15, Erasmus Hall; May 27, Hamilton; May 14, Mount Pleasant; May 28, Cazenovia; May 21, Oxford; May 18, Rochester; May 20, North Salem.

Lilac in flower.—May 28, Cortland; June 4, Hamilton; May 21, Rochester; May 22, North Salem.

Elder in flower.—May 18, Rochester; June 23, North Salem.

Dogwood in blossom.—May 17, Erasmus Hall; May 15, Mount Pleasant; May 31, North Salem.

Peaches in flower.—April 25, Erasmus Hall; May 7, Lewiston; May 20, Mexico; May 3, Rochester; May 12, North Salem.

Horsechesnut in flower.—May 23, Rochester.

Gooseberries in blossom.—April 28, Erasmus Hall.

Viburnum Roseum in bloom—June 3, Rochester.

Red Clover in flower.—June 12, Cortland; June 14, Fairfield; May 30, North Salem.

Gooseberries ripe.—June 7, North Salem.

White Clover in flower.—June 13, Cortland; May 30, North Salem.

Strawberries ripe.—June 18, Cortland; June 8, Rochester; June 11, North Salem; June 1, Union Hall.

Cherries ripe.—June 16, Rochester; June 20, North Salem.

Locust Trees in flower.—June 20, Cortland; June 14, Erasmus Hall; June 20, Rochester; June 14, North Salem.

Raspberries in blossom.—June 5, Erasmus Hall.

Blackberries in blossom.—June 5, Erasmus Hall.

Hay Harvest commenced.—July 5, Cortland; June 20, Erasmus Hall; July 11, Hamilton; June 25, Rochester; June 26, North Salem.

Green Peas.—June 30, Hamilton; June 19, Rochester; June 13, Union Hall; July 1, North Salem.

Currants ripe.—July 7, Cortland; July 10, Rochester; July 1, North Salem.

Raspberries ripe.—July 6, Rochester; July 3, North Salem.

Wheat Harvest commenced—July 20, Cortland; July 3, Erasmus Hall; July 9, Rochester; July 19, North Salem.

Rye Harvest commenced.—July 21, Cortland; July 16, North Salem.

Green Corn.—August 7, North Salem.

Quinces ripe.—September 26, North Salem.

(See also the Reports of Amenia Seminary, F. G; of the New-York Deaf and Dumb Institution; the Abstracts of Ten Years' Observations at North Salem; and the Remarks on the Vegetable Productions of the Year, in the Report of Rochester Collegiate Institution, all in subsequent pages.)

2. APPEARANCE OR PASSAGE OF BIRDS, &c.

Robins first seen.—March 21, Albany; March 15, Auburn; March 16, Cortland; March 13, Erasmus Hall; March 14, Fairfield; March 16, Farmers' Hall; March 16, Hamilton; March 13, Lewiston; March 21, Lowville; March 16, Cazenovia; March 29, Plattsburgh; March 8, Rochester; March 4, Union Hall.

Pigeons first seen.—March 13, Auburn; March 15, Cortland; March 29, Fairfield; March 15, Cazenovia; March 17, Rochester.

Crows flying north.—March 12, Plattsburgh.

Blue birds first seen.—March 16, Auburn; March 16, Cortland; March 12, Erasmus Hall; March 16, Fairfield; March 14, Farmers' Hall; March 18, Hamilton; March 12, Lewiston; March 1, Newburgh; March 16, Cazenovia; March 6, Rochester; March 5, Union Hall.

Red Headed Woodpecker seen, March 8, Fairfield.

Phœbe birds first seen.—March 7, Hamilton; March 18, Rochester; March 23, North Salem.

Frogs first heard.—March 30, Cortland; March 19, Erasmus Hall; April 3, Fairfield; April 4, Hamilton; April 4, Lowville; April 4, Mexico; March 24, North Salem, March 19, Union Hall.

Meadow Lark seen.—March 28, Fairfield; March 22, Rochester.

Butterflies first seen.—March 31, Rochester; May 19, North Salem.

Martins first seen.—May 17, Erasmus Hall; April 16, Rochester.

Whippoorwill heard.—May 4, North Salem.

Baltimore Oriole first seen.—May 5, Auburn.

Chimney Swallow first heard.—May 8, Rochester; April 30, North Salem.

Bob-o-links first seen.—May 1, Cortland; May 11, Rochester; May 9, North Salem.

Yellow Birds first heard.—May 10, Rochester.

Field Sparrow first heard.—April 7, Rochester.

Barn Swallows first seen.—May 12, Cortland; May 14, Erasmus Hall; May 10, Hamilton; May 9, Cazenovia; May 3, Plattsburgh; April 29, Rochester; April 9, North Salem.

Bats first seen.—May 16, Mount Pleasant.

Humming Birds first seen.—June 2, Cortland; July 6, North Salem.

Fire flies first seen.—June 18, Cortland; June 21, Erasmus Hall; June 13, Fairfield; June 16, Rochester; June 3, North Salem.

Locusts heard.—July 22, Erasmus Hall; August 5, North Salem.

Wild Geese.—October 13, Lewiston; Oct. 1, Rochester, March 20, flying south, North Salem.

(See also the reports of Amenia Seminary, of the Deaf and Dumb Institution and of North Salem, hereafter.)

3. ATMOSPHERIC PHENOMENA.

A. AURORA BOREALIS.

January 14. North Salem, Poughkeepsie, Hamilton, Lewiston, Oxford, Plattsburgh, Rochester.

January 15 Oxford.

January 30. Cazenovia.

February 13. Hamilton.

February 14. Cortland, Poughkeepsie.

February 16. Cortland, Hamilton, Cazenovia, North Salem, Rochester.

February 17. Hamilton, Lowville, Plattsburgh.

February 18. Hamilton, Lowville, Plattsburgh, North Salem, Rochester.

February 19. Cortland, Poughkeepsie, Cazenovia, Rochester.

February 21. Poughkeepsie, Lowville.

February 28. Rochester.

March 14. Granville.

March 17. Cazenovia, Hamilton, Hartwick, Lewiston.

March 18 Hamilton, Johnstown, Lewiston, Mount Pleasant, Poughkeepsie, Rochester.

A luminous arch about 10 or 13° high in the centre, which was somewhat east of north. Streamers shot up sometimes from the edge of the arch and sometimes from the horizon or near it, at first generally white; occasionally a tinge of red, and the whole had a slow motion to the west, North Salem, Union Hall.

March 19. Lowville.

March 20. Lansingburgh

March 25. Rosy light around the horizon, just before sunset. Erasmus Hall.

March 30. Rochester.

April 16. Rochester.

April 17. Plattsburgh, Rochester.

April 30. Cortland.

June 10. Cortland.

July 9. Rochester.

July 12. Hamilton, Rochester.

July 22. Hamilton, Rochester.

July 23. Auburn, Mexico, Rochester.

July 24. Brilliant, Farmer's Hall.

August 12. Hamilton.

August 13. Cortland.

September 6. Hamilton.

September 7. Hamilton.

September 12. Rochester.

September 13. Rochester.

September 17. Hamilton.

September 18. Hamilton, Rochester.

October 13. Cazenovia, Rochester.

October 14. Rochester, North Salem.

October 18. Oxford.

December 7. Poughkeepsie.

December 18 Rochester.

(See also Amenia, Deaf and Dumb Institution, and North Salem reports.)

B. Haloes, &c.

January 1, Solar halo, Hamilton.

January 7, Lunar halo, Erasmus Hall.

January 10, very brilliant parhelia on each side of the sun about 4 p. m., Hamilton; two mock suns, evening, Rochester.

January 11, very brilliant parhelion on each side of the sun, Hamilton.

January 14, Solar halo, Hamilton.

January 24, Solar halo, Hamilton.

January 29, Lunar halo, Hamilton.

January 30, Lunar halo, Cortland, Cazenovia.

January 31, Lunar halo, Cortland, Erasmus Hall, Hamilton.

February 4, Lunar halo, Erasmus Hall, North Salem, Rochester.

February 5, Lunar halo Rochester.

February 6, Lunar halo, Plattsburgh.

February 12, Solar halo, Hamilton.

February 13, Solar halo, p. m., Cortland.

February 15, Beautiful parhelion at 4 p. m., Hamilton.

February 16, Solar halo, a. m., Cortland Hamillton, mock suns, p. m., Plattsburgh, Solar halo, Rochester.

February 17, Solar halo, Hamilton.

February 19, Solar halo a little after sunrise, Hamilton.

February 24, Solar halo, Hamilton.

February 26, Solar halo, Hamilton.

February 28, Solar halo, Hamilton, Rochester.

March 3, Solar halo, Hamilton.

March 6, Lunar halo, Rochester.

March 9, Lunar halo, Hamilton.

March 10, Lunar halo, North Salem.

March 27, Solar halo, Rochester.

April 3. Lunar halo, Erasmus Hall.

April 6. Lunar halo, Hamilton, Solar halo, Rochester.

April 7. Solar halo, Rochester.

April 8. Solar halo, Rochester.

April 12. Solar halo, mock sun at eve, Rochester.

April 17. Solar halo, Rochester.

May 1. Solar halo, 11 a. m., Lunar halo, 8 p. m., North Salem.

May 2. Lunar halo, Lowville.

May 26. Lunar halo, very large 9 p. m., North Salem.

May 27. Parhelion, 4 p. m., North Salem.

June 18. Solar halo, Hamilton.

June 20. Solar halo, with prismatic colors, 11 a. m., North Salem.

June 23. Solar halo, 3 p. m., Hamilton.

June 24. Solar halo, Rochester. Solar halo, 10½ a. m., Hamilton.

June 27. Lunar halo, Auburn. Solar halo, Rochester.

July 3. Solar halo, Rochester.

July 5. Lunar halo, Hamilton.

July 18. Solar halo, Rochester.

July 25. Solar halo, 11 A. M., North Salem; solar halo, Rochester.

July 27. Solar halo, A. M., Rochester.

July 28. Solar halo, Rochester.

August 27. Lunar halo, North Salem.

September 4. Solar halo, A. M., Cortland.

September 24. Lunar halo, North Salem.

October 15. Solar halo, Hamilton.

October 21. Solar halo, Rochester.

October 28. Lunar halo, Erasmus Hall; Lunar halo, North Salem.

November 17. Solar halo, Hamilton.

November 28 Lunar halo, Erasmus Hall.

November 29. A large and bright lunar halo at 7 P. M., North Salem.

November 30. Lunar halo, Rochester.

December 23. Lunar halo, Erasmus Hall; Hamilton; North Salem.

December 25. Lunar halo, Cortland.

December 27. Lunar halo, Hamilton.

December 28. Lunar halo, North Salem.

(See also the Reports of the Deaf and Dumb Institution and of North Salem, and the Remarks on the Lunar Halo of Nov. 30, in the Report of the Rochester Collegiate Institute.)

C. WEATHER BEFORE AND AFTER AURORAS AND HALOES.

(See Amenia, Deaf and Dumb Institution, and North Salem Reports.)

D. RAINBOWS AND SUNSETS.

(See Deaf and Dumb I. Report.)

E. METEORS.

January 19. A brilliant meteor seen this evening, Hamilton; also noticed at Rochester.

October 25 Meteor observed, Erasmus Hall.

METEORITE.

(Seen by S. W. Clark, A. M., Principal of East Bloomfield Academy.)

" At about 6 o'clock on Wednesday evening, Nov. 7, 1849, while I was walking to the westward, my attention was suddenly arrested by a light about me, such as at first, suggested the presence of "heat lightning," but on looking up, I saw directly to the west, and elevated about 30 degrees, a brilliant Meteorite, apparently ten times the size of Venus, and far surpassing her in splendor.

At first it was of a pure white with radiating fringe of light, but no tail—increasing in size as it passed east and south. It exploded without noise, at an elevation of about ten degrees south of west.

On exploding it presented the appearance of a magnificent rocket, sending off in every direction masses of luminous matter, changing in color from perfect white to reddish purple, and finally to a pale pea green.

The time of its continuance after first being seen, I estimate to be about 30 seconds."

4. TEMPERATURE.

A. Table *of the periods when the Hudson river opened and closed at Albany, so far as the same can be now ascertained.*

Winters.	River closed or obstructed by ice.			River open or free of ice.			No. days closed.
1785-86	....			•March	23,	1786	
1789-90	February,	3,	1790	•March	27,	1790	52 days.
1790-91	December	8,	1790	•March	17,	1791	99 days.
1791-92	December	8,	1791				
1792-93	December	12,	1792	•March	6,	1793	84 days.
1793-94	December	26,	1793	•March	17,	1794	81 days.
1794-95	January	12,	1795				
1795-96	January	23,	1796				
1796-97	November	28,	1796				
1797-98	November	26,	1797				
1798-99	November	23,	1798				
1799-1800	January	6,	1800				
1800-01	January	3,	1801				
1801-02	February	3,	1802				
1802-03	December	16,	1802				
1803-04	January	12,	1804	•April	6,	1804	84 days.
1804-05	December	13,	1804				
1805-06	January	9,	1806	•February	20,	1806	42 days.
1806-07	December	11,	1806	•April	8,	1807	121 days.
1807-08	January	4,	1808	•March	10,	1808	65 days.
1808-09	December	9,	1809				
1809-10	January	18,	1810				
1810-11	December	14,	1810				
1811-12	December	20,	1811				
1812-13	December	21,	1812	•March	12,	1813	83 days.
1813-14	December	22,	1813				
1814-15	December	10,	1814				
1815-16	December	2,	1815				
1816-17	December	16,	1816				
1817-18	December	7,	1817	March	25,	1818	108 days.
1818-19	December	14,	1818	April	7,	1819	110 days.
1819-20	December	13,	1819	March	25,	1820	102 days.
1820-21	November	13,	1820	March	15,	1821	123 days.
1821-22	December	13,	1821	March	15,	1822	92 days.
1822-23	December	24,	1822	March	24,	1823	90 days.
1823-24	December	16,	1823	March	3,	1824	78 days.
1824-25	January	5,	1825	March	6,	1825	60 days.
1825-26	December	13,	1825	•February	26,	1826	75 days.
1826-27	December	24,	1826	•March	20,	1827	86 days.
1827-28	November	25,	1827	•February	8,	1828	About 50 days.
1828-29	•December	23,	1828	•April	1,	1829	100 days.
1829-30	•January	11,	1830	•March	15,	1830	63 days.
1830-31	•December	23,	1830	•March	15,	1831	82 days.
1831-32	•December	5,	1831	•March	25,	1832	111 days.
1832-33	•December	21,	1832	•March	21,	1833	8[illegible] days.
1833-34	•December	13,	1833	•February	24,	1834	73 days.
1834-35	•December	15,	1834	•March	25,	1835	100 days.
1835-36	•November	30,	1835	•April	4,	1836	125 days.
1836-37	•December	7,	1836	•March	28,	1837	111 days.
1837-38	•December	13,	1837	•March	19,	1838	94 days.
1838-39	•November	25,	1838	•March	21,	1839	116 days.
1839-40	•December	18,	1839	•February	21,	1840	65 days.
1840-41	•December	5,	1840	•March	24,	1841	109 days.
1841-42	•December	19,	1841	•February	4,	1842	47 days.
1842-43	•November	29,	1842	•April	13,	1843	136 days.
1843-44	•December	9,	1843	•March	14,	1844	95 days.
1844-45	•December	11,	1844	•February	24,	1845	74 days.
1845-46	•December	4,	1845	•March	15,	1846	101 days.
1846-47	•December	16,	1846	•April	6,	1847	112 days.
1847-48	•December	21,	1847	•March	22,	1848	89 days.
1848-49	•December	27,	1848	•March	19,	1849	82 days.
1849-50	•December	25,	1849	March	9,	1850	73 days.

Mem.—All those marked • are derived from authentic records or personal observation.

NOTES.—1817-18. This winter was long and intensely cold. On the third of March, 1818, the ice moved in a body downwards for some distance, and there remained stationary. The river was not clear until March 25th.

1820-21. The river closed on the 13th, opened on the 20th, and finally closed Dec. 1. This was one of the four winters during a century, in which the Hudson, between Powles' Hook and New-York, was crossed on the ice; the other three being 1740, '41, 1765, '66, and 1779, '80.

Jan. 12, 1821. The river was clear of ice, and remained so for several days.

1827-28. The river opened and closed repeatedly during this winter. Dec. 21, it closed a second time.

1830-31. Opened in consequence of heavy rains, and closed again on the 10th January, 1831.

1832-33. Opened again January 3; closed again January 11.

1834-35. March 17. River open opposite to the city. March 18. Steamboat John Jay came to Van Wie's Point; ice at the overslaugh.

1847-48. Dec. 24. River closed. Dec. 31. River open.

As the river *throughout* to New-York, has not always been clear of ice on the days stated above, the time at which the first steamboat passed from New-York to Albany or vice versa, is also added for a few years.

1835, March 25.

1836, April 10.

1837, March 31, Robert L. Stevens.

1838, March 17, Utica.

1839, March 25, Swallow.

1840, February 25, Mount Pleasant.

1841, March 26, Utica.

1841, February 6, Telegraph. In consequence of heavy rains, the river opened in front of the city of Albany on the 8th of January, and can hardly be said to have closed again during the season. The ice, however, continued piled up some miles below, at and about Barren Island, near Schodack Landing, and thus rendered the channel impassable. Cold weather followed about the middle of February, and again obstructed the navigation. A steamboat arrived again on the 1st of March, 1842

1843, April 13, Utica.

1844, March 18, 11 A. M., Utica.

1845, February 24, steamboat Norwich at 1 A. M., from New-York. Left that city on the 22d, at 8 P. M. River full of ice from West Point upwards. Ice opposite Albany, stationary, except a small portion that broke away yesterday opposite Lydius-street.

1846, March 18, steamboats Columbia and Oneida arrived.

1847, April 7, steamboat Columbia.

1848, March 22, steamboat Admiral.

1849, March 18, steamboat Columbia.

1850, March 9, steamboat Buffalo.

B. OPENING AND CLOSING OF RIVERS, LAKES, AND CANALS.

HUDSON RIVER.

River closed night of December 25, Albany.

March 18. First steam boat at Albany, *Lansingburgh.*

March 13. First steam boat to Poughkeepsie (Dutchess County Academy.)

January; about the 3d, the Hudson River was frozen over and foot passengers began to cross on the ice till about the 24th. From the 11th, sleighs were drawn over and so late as the 20th, loads of coal were dragged over in sleds, Newburgh. January 24, the ice has begun to soften, Newburgh.

February 7, the river is again frozen over; Newburgh, March 12, steamboat reached Newburgh from New-York; Newburgh.

ERIE CANAL.

December 1, Canal frozen, Hamilton.

LAKE CHAMPLAIN.

January 4. Lake frozen before this place, Plattsburgh.

Jan. 11. Broad Lake frozen, Plattsburgh.

April 7. Ice going out, and April 8, first steamboat in port. Plattsburgh.

C. WEATHER, WINDS, STORMS, &c.

See the abstract of ten years' observations at North Salem in its report, with the accompanying remarks, and the remarks as to each month of 1849.

In the Rochester Collegiate Institute report, see the heads of Meteoric Phenomena, Ice Shower, Thermometrical Observations for 1849, Thunder Shower in June 1849, Fogs, Coronation of Winter.

Temperature of Northern New-York.

A correspondent sends us the following notes of the range of the Thermometer in Northern New-York, as noticed at sunrise:

	At Rouse's Point.	*At Champlain Valley.*
February 12th	4° below zero	3° below zero.
13th	12 " "	20 " "
14th	9 " "	10 " "
15th	14 " "	22 " "
16th	16 " "	23 " "
17th	17 " "	30 " "
Sunday—18th	15 " "	23 " "
19th	16 " "	31 " "
20th	18 " "	
21st	6 above "	

Winter of 1779–80.—A correspondent of the N. Y. Journal of Commerce furnishes that paper with the following article respecting the cold winter of 1779–80, which has recently appeared in an English paper, and which is an extract from an official letter from Major General Pattison, dated New-York, Feb. 22, 1780, to Lord George Germaine:

"The intense frost accompanied with great falls of snow, which begun here about the middle of December; shut up the navigation of this port from the sea. Within a few days after, Admiral Arbuthnot's fleet with the troops under the commander-in-chief had taken its departure from Sandy Hook. The severity of the weather increased to that degree, that towards the middle of January, all communications with the city, by water, were entirely cut off, and as many new ones opened by the ice. We could scarcely be said to be in an insular state. The passage of the North River, even in the widest part, from here to Paulus Hook, (2000 yards) was, about the 19th, practicable for the heaviest cannon; an event unknown in the memory of man; and very soon after, provisions were transported upon sledges, and detachments of cavalry marched from New-York to *Staten*, (11 miles*) upon the ice. The East River to Brooklyn on Long Island, was also for many days, blocked up.

"We had reports that Gen. Washington was about to attack us, and we prepared to receive him. Our forces mustering rank and file, 5796. The rigor of the frost is now *happily abated*, and we are flattered with the prospect of a complete thaw."

Nov. 7, Dandelions in blossom, Hamilton.

D. NUMBER OF THUNDER SHOWERS AND SNOW STORMS.

(Thunder showers, see report of Amenia Seminary. For thunder showers and snow storms, see report of North Salem.)

5. MISCELLANEOUS.

A. Level of Lake Ontario. (See the Rochester report.)
B. Ice on Lake Ontario. (See the Rochester report.)
C. Water spout.

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* The government survey by Hasler, gives the distance from the Battery to the Quarantine ground, at 4¾ miles.

C. WATERSPOUT.

(Seen by S. W. CLARK and others, at East Bloomfield, N. Y.)

On the 8th September, 1849, at about 4 o'clock P. M., a waterspout appeared to the NNE, apparently about 10 miles distant; but possibly over Lake Ontario, which is nearly 20 miles from this place.

During the afternoon the wind was high, frequently changing from NW to SW and rechanging, producing some slight and limited showers. The clouds were heavy and detached, the *cumulus* or *cumulo-stratus*.

Immediately preceding the formation of the waterspout a dense mass of clouds of the above mentioned form, passed rapidly towards the east from over Rochester; and, at the same time, masses as dense and quite black, rushed from the south. These clouds on meeting, sent down a short but brisk shower. This shower being over, there appeared to be a white bag let down from the black cloud above, like a sheet "knit at the corners"—then contracting in diameter, and lengthening both downwards and upwards, it gradually and in perhaps two or three minutes, reached the horizon. The appearance of the clouds above, changed rapidly, and the spout now appeared complete, a perfectly cylindrical column, having a slight progressive and a manifest gyratory motion. After continuing thus perfect about five to eight minutes, it broke midway; the lower portion suddenly disappearing below the horizon, the upper part gradually rising up, going through the several changes of funnel-shaped, inverted, bill-shaped and bag-shaped, then hiding itself in the dense black clouds which had overshadowed it.

Time from the first appearance to the perfect disappearance of the spout, was about 15 minutes.

6. BAROMETRICAL OBSERVATIONS.

A. ALBANY ACADEMY.

A. ALBANY ACADEMY.

Result of Barometrical Observations made at 6 A. M., 3 P. M., and 9 P. M., daily for the year 1849, at Albany Academy.

MONTHS.	1st half.	2d half.	Mean.	Maximum.	Minimum.	Range.
January,	30.00	30.16	30.08	19, 30.75	5, 29.46	1.29
February,	29.95	30.35	30.15	28, 30.71	1, 29.74	0.97
March,	30.08	29.98	30.03	4, 30.47	21, 29.43	1.04
April,	29.93	29.89	29.91	27, 30.33	19, 29.30	1.03
May,	29.92	29.92	29.92	3, 30.43	14, 29.35	1.08
June,	29.90	29.88	29.89	13, 30.20	8, 29.63	0.57
July,	30.00	29.94	29.97	24, 30.19	21, 29.61	0.58
August,	29.86	29.95	29.91	30, 30.08	10, 29.60	0.48
September,	30.09	29.80	29.95	11, 30.33	23, 29.44	0.89
October,	29.82	29.95	29.88	20, 30.20	11, 29.39	0.81
November,	29.91	29.87	29.89	16, 30.24	30, 29.52	0.62
December,	29.97	29.89	29.94	12, 30.42	23, 28.97	1.45

Mean for the year,	29.96
Range,	1.78
Greatest monthly range,	1.45
Least,	0.48

B, C, D, E, will be found in the succeeding abstracts.

AMENIA SEMINARY—ANNUAL ABSTRACT.

B. BAROMETRICAL OBSERVATIONS.

MONTHS.	MAXIMUM.		MINIMUM.		Range.	MONTHLY MEAN.			Mean of 3 daily observat'ns.	Attached thermomt'r, mean.		
	Day.	Inches.	Day.	Inches.		Morning	Aftern'n	Evening		Morning	Aftern'n	Evening
January,	19	30.44	5	29.27	1.17	29.87	29.86	29.83	29.85	38.26	61.03	55.03
February,	27	30.44	9	29.20	1.24	29.85	29.86	29.89	29.87	34.43	61.07	58.50
March,	4	30.23	21	29.30	.93	29.80	29.80	29.79	29.80	49.35	67.13	60.64
April,	22	30.11	19	29.06	1.05	29.71	29.72	29.73	29.72	51.50	62.37	59.87
May,	3	30.24	14	29.27	.97	28.80	29.78	29 80	29.79	58.53	64.09	61.97
June,	12	30.11	8	29.50	.61	29.81	29.80	29.81	29.81	67.00	74.16	70.90
July,	25	30.05	21	29.55	.50	29.89	29.88	29.89	29.89	69.84	79.09	73.89
August,	27	29.98	15	29.55	.43	29.84	29.82	29.82	29.83	68.23	73.93	77 22
September,	11	30.23	23	29.35	.88	29.87	29.90	29.86	29 88	60.30	69.57	64.40
October,	20	30.10	7	29.25	.85	29.77	29.76	29.79	29.77	54.03	65.65	59 93
November,	16	30.15	9	29.44	.71	29.79	29.79	29.79	29.79	56.07	72.03	64.47
December,	12	30.30	22	28.85	1.45	29.76	29.76	29.76	29.76	44.52	55.32	56.45
	Jan. Feb.	30.44	Dec.	28.85	1.59	29.81	29.81	29.81	29.81			

Greatest semi-annual mean, second half of February,	30.08 inches
Least " first " "	29.65 "
Greatest descent in 24 hours, December 21, 22,	1.05 "

C. TABLE

Of thunder showers, and comparison of Barometer with the annual mean, 29.81 inches

Thunder, lightning and rain.	Wind.	Barometer.	Distant thunder show'rs	Wind.	Barometer.	Heat lightning.	Wind.	Barometer.
May 30,.........	NE	+.11	May 4,.......	W	+.05	June 15,.......	S	—.01
June 4,.........	NW	—.17	May 22,.......	S	—.17	22,.......	NW	+.04
July 8,.........	S	+.10	June 3,.......	S	—.11	Sept. 17,.......	SW	—.06
July 20,.........	S	—.01	June 22,.......	NW	+.04			
July 21,.........	NW	—.26	July 8,.......	S	+.10			
Aug. 29,.........	SW	+.14	July 9,.......	E	+.14			
Sept. 23,.........	NW	—.37						
Oct. 23,.........	NW	—.36						
Nov. 8,.........	E	—.31						
		mean.			mean.			—.01
		—.13			+.008			mean.

D. TABLE

Of Auroral Boreales.

Rain first preceding.	Clouds first preceding.	Wind same day.	Temperat'e same day.	Date of occurrence.	Temp. following day.	Wind following day.	Clouds first succeeding.	Rain first succeeding day.
March 15,	March 17,	W	37.67	Mar. 17,.....	32.33	NW	March 20,	March 20
15,	17,	NW	32.33	18, bright	32.33	NW	20,	20
15,	17,	NW	32.33	19, faint.	46.33	SE	20,	20
April 15,	April 16,	SW	42.17	Apr. 17,.....	35.50	NE	April, 18,	April 18
18,	20,	NW	37.17	20,.....	40.00	NW	22,	28
June 10,	June 16,	NW	77.50	June 20,.....	76.33	NW	June 24,	June 22
Sept. 8,	Sept. 17,	N	58.17	Sept. 18, bright	50.00	N	Sept. 19,	Sept. 22
23,	23,	NW	58.00	23,.....	50.17	NW	Sept. 26,	30
Oct. 11,	Oct. 13,	N	44.50	Oct. 13, faint.	37.00	N	Oct. 15,	Oct. 17
11,	13,	N	37.00	14, bright	48.50	S	15,	17

E. TABLE

Showing the time of the first appearance of some of the spring Birds.

Date.	Common Name.	Scientific Names, [New-York Fauna.]
March 12,	Bluebirds, ...	Sialia wilsoni.
13,	Robins, ...	Merula migratoria.
13,	Chippingbirds, ...	Emberiza socialis.
18,	Meadow Larks, ...	Sturnella ludoviciana.
24,	Phœbebirds, ...	Muscicapa fusca.
April 28,	Barn Swallows,......	Hirundo rufa.
May 4,	Whippoorwill, ...	Caprimulgus vociferus.
11,	Bobolink, ...	Dolichonyx oryzivorus.
12,	Chimney Swallows, ..	Chætura pelasgia.
13,	Wood Thrush, ...	Merula mustelina.
17,	Golden Oriole, ...	Icterus baltimore.

F. TABLE OF SUNDRIES.

Fogs occurred eighteen times during the year.

There occurred eleven frosts in September and October; six slight, five killing.

Indian summer commenced about Oct. 25th, and continued till about Nov. 18th, including fourteen days unusually smoky.

Venus was frequently seen in the day time with the naked eye, during the first half of April.

Solar spots were detected with the naked eye, Nov. 4th.

July 3. Haying commenced.
July 19. Harvest commenced.
Sep. 28. Foliage of forest trees had begun to change color.
Oct. 18. Foliage completely changed in color.
Oct. 25. Forest trees nearly naked.

G. TABLE *Showing the progress of Vegetation.*

Date of Flowering.	Common Names.	Scientific Names, [N. Y. Flora.]
April 3,	Chickweed,	Stellaria media.
4,	Shepherdspurse,	Capsella bursa-pastoris.
5,	Breechesflower,	Dicentra cucullaria.
5,	Dead Nettle,	Lanium amplexicaule.
5,	Saxifrage,	Saxifraga virginiensis.
5,	Bloodroot,	Sanguinaria canadensis.
5,	Liverwort,	Hepatica triloba.
20,	Dandelion,	Taraxacum dens-leonis.
26,	Plantain-leaved Cudweed	Antennaria plantaginifolia.
27,	Bluets,	Hedyotis cœrulea.
29,	Windflower,	Anemone nemorosa.
May 3,	Early Meadow Rue,	Thalictrum dioicum.
3,	Cowslip,	Caltha palustris.
5,	Arrow leaved Violet,	Viola sagittata.
10,	False Wakerobin,	Trillium erectum.
12,	Shadflower,	Amelanchier canadensis.
13,	Common Cherry,	Cerasus vulgaris.
15,	Red Currant,	Ribes rubrum.
22,	Apple,	Pyrus malus.
22,	Field Sorrel,	Rumex acetosellus.
25,	Canadian Columbine,	Aquilegia canadensis.
25,	Cranesbill,	Geranium maculatum.
26,	Wild Honeysuckle,	Rhododendron nudiflorum.
June 2,	Red Clover,	Trifolium pratense.
2,	White Clover,	repens.
8,	Common Daisy,	Leucanthemum vulgare.
9,	Rye,	Secale cereale.
19,	Locust,	Robinia pseudo-acacia.
19,	Snowberry,	Symphoricarpus racemosus.
22,	Yarrow,	Achillea millefolia.
24,	Timothy Grass,	Phleum pratense.
24,	Plantain,	Plantago major.
30,	Blue Vervain,	Verbena hastata.
July 5,	Mayweed,	Maruta cotula.
7,	Potato,	Solanum tuberosum.
Aug. 17,	Pubescent False-foxglove	Gerardia flava.
20,	Steeplebush,	Spiræa tomentosa.
21,	Snakehead,	Chelone glabra.
21,	Parnasus Grass,	Parnassia caroliniana.
Sept. 1,	Bur Marigold,	Bidens frondosa.
1,	Sneezeweed,	Helenium autumnale.
1,	Lady's tresses,	Spiranthes tortilis.
1,	Oak of Jerusalem,	Ambrina botrys.
29,	Fringed Gentian,	Gentiana crinita.
Oct. 17,	Red-flowered Spurry,	Spergula rubra.
Nov. 26,	Water Chickweed,	Callitriche verna.

Amenia Seminary, *January* 21, 1850.

I send in the preceding pages, a copy of the Meteorological observations kept by me for the year 1849. This, I believe is the first attempt of the kind that has been made by any person connected with this institution.

Amenia Seminary is situated in a valley about one mile and a half wide, 25 miles distant east by north from Poughkeepsie, and 8 miles north from Dover, the present terminus of the Harlem railroad. Its latitude, as nearly as can be ascertained from large maps, is 41° 48′ N., and longitude as found by the same means, is 73° 36′ W. from Greenwich. Its elevation, as ascertained from the engineer of the Harlem railroad, is 540 feet above medium tide in Harlem river. Its location exposes it to the winds from all quarters except the west, in which direction the wind is obstructed by a mountain of about four hundred feet elevation.

The present records contain observations made upon the thermometer, as nearly as possible in accordance with the instructions of the Regents. Every precaution has been taken to avoid any inaccuracies which might arise from the reflection of the sun's heat, or from the proximity of any object much above or below the temperature of the surrounding air. To be more certain of accuracy, the correctness of the indication has been frequently verified, both in the usual way of testing the thermometer, and also by changing the location of the instrument, and observing whether it produced any variation in the height of the mercury. The instrument used was made by J. M. Wightman, of Boston.

The record of the direction of the wind and the state of the weather, has been kept according to my understanding of the directions of the Regents; but I am yet in doubt respecting the mode of recording rain, &c. The instructions say : (p. 50) " For the weather, enter in the A. M. column fair or cloudy, as either of these aspects may prevail in the forenoon. Do the same in the P. M. column, for the weather of the afternoon. When rain or snow falls, or both together, instead of cloudy enter rain, snow, or R. & S , for rain and snow." The natural inference from this language is, that rain, snow, &c., are to be entered in the same way as fair and cloudy, and in the same column, *i. e.* whichever prevails—of fair, cloudy, rain, snow, &c.—is to be entered. The form, likewise, for each month, which is appended to the instructions, seems to have been made out in accordance with such an understanding. It is thus that the weather column has been kept in the present report.

But in prescribing rules for the monthly synopsis, the Regents add: (p. 51) "The column of fair and cloudy days, should be kept *totally distinct* from that of rain, snow, &c. * * * State first the number of fair and cloudy days in each month; then the number of days (no matter whether on one day it rained only fifteen minutes, and on the other twenty-four hours,) on which rain has fallen; the same as to rain, or rain and snow." In this it seems to be implied that *every* fall of rain, slight or abundant, should be recorded. But this cannot be done in the same column with the record of fair and cloudy days, since it is evident there may be an hour's rain, or more or less, in any half day, without giving a rainy character to that half day—the prevailing aspect of which may even be fair. In order, therefore, to keep a record of *every* fall of rain, and also of the prevailing character of the weather for each half day, it is necessary to provide one column for fair and cloudy days, and another for rain, snow, &c.; a provision which is not indicated by the language first quoted from the instructions, nor exemplified in the form, which "must be *literally* followed."

In the present report, however, rain, &c., have been entered in the weather column, according to the prevailing aspect; and whenever rain, &c, occurred on any half day which could not be designated as "rainy," &c., the fact has been mentioned among the "supplementary observations," and the appropriate entry of fair and cloudy, made in the weather column for that half day.

It was my design to have added observations with the rain gage, but I was unable to obtain an instrument until so much time had elapsed that I saw but little inducement to commence my measures of the rain before another year. I am now provided with a rain gage 13 inches in diameter above, and 4.5 inches below; and also with a snow vessel, 13 inches across at top, and 20 inches at bottom, so that I hope the observations for the present year will be complete.

Observations have also been made upon the barometer and attached thermometer, at the same times as upon the external thermometer, but no reductions have been applied to the observed height of the mercurial column. The instrument used is a pediment barometer, made by J. M. Wightman, having a tube .12 inch, and a cistern 1.2 inch in diameter.

At the close of the daily observations, I have made out the "Annual Abstract" (A,) in the form required by the Regents, with the exception of the number of inches of rain. The monthly means of the thermometer have been calculated by dividing the sum of the daily means by the number of days in the month, instead of taking half the sum of the semi-monthly means. For the same reason the annual mean has been estimated by dividing the sum of all the daily means by 365, instead of taking one twelfth of the sum of the monthly means. The difference in the results obtained by the two methods is quite important.

The Table marked (B.) is an abstract of the barometrical observations. It contains the means for each month and for the year, of the morning, afternoon, and evening observations, and also the monthly and annual mean of these three means. The means of the attached thermometer are given for the corresponding times. The same table exhibits the maximum, minimum, and range, for each month and for the year. The above means have all been calculated with the same care as those of the thermometer. From this table it will be seen that the well known diurnal variations of the barometer have not had any perceptible influence upon the means for the year. This may be either from the minuteness of these variations, or from the fact that each of the barometrical observations is made at a point of time about equidistant from the hours of the highest and lowest diurnal range.

The table marked (C,) is designed to show the number and date of the occurrences of thunder showers and heat lightning, with contemporaneous observations upon the barometer. The mercurial column is generally but little affected by showers of limited extent, but it will be seen that the mean of all the differences in the table is .13 inch below the annual mean.

The table marked (D,) exhibits the dates of the occurrence of the aurora borealis, and its association with winds, clouds, and storms, both preceding and following. The indications of this table seem to be that the aurora borealis portends either colder weather or a change of wind, clouds and a storm.

Table (E.) exhibits the times of the first appearance of some of the spring birds.

Table (F,) comprises sundry observations that might be deemed of interest. Among them is a mention of the discovery with the naked eye of two solar spots. These spots were visible for about a week, near the first of November. So far as I have ascertained, I am the only person who discovered them with the naked eye, though after being pointed out, they were as easily distinguished by others as by myself. The larger spot, as measured at the Cambridge Observatory, was 47,000 miles in diameter. I have thus had positive demonstration of the possibility of distinguishing the solar spots without telescopic aid; a matter which has heretofore been among astronomers a subject of much scepticism.

(G,) is a list giving the common and scientific names of some of the more important plants, with the times when they were first observed in flower. Few, except the spring plants, have been given, as the flowering of later ones was deemed of less consequence.

I will here add that I have collected, arranged and labeled, nearly eight hundred species of plants growing in this vicinity, and have formed of them an herbarium for the use of the Institution. This is yet incomplete, but I hope that after the herborizations of another season, there will be few species left out of the collection. I have thought that a classified catalogue of such a collection, when completed, would be an acceptable appendage to the meteorological report for next year.

The changes of the wind for the past year have been somewhat peculiar. Ordinarily, the course of these changes, as ascertained by considerable observation, has been as follows: Commencing with any fair day, when the wind is north or northwest, the wind and weather usually remain nearly the same until a period of almost total calm occurs. After this, by degrees a new wind starts up from some stormy direction—NE, E, SE or S,—and generally continues until a storm takes place; during which the wind gradually veers round through the several points of the compass, until it reaches SW, when the storm generally ceases. In a few hours after this the wind usually reaches the W, NW or N, and the clouds gradually disperse.

During the year 1849, the course of the changes has been different. For instance, in the storm which commenced on the 27th of March, the wind was NE, and continued blowing with considerable violence from that quarter, accompanied with snow and rain, until the 30th, when, without abating its force, it had turned round to the N, and on the 31st it had reached the NW, and the afternoon of that day was fair.

On the other hand, on the 1st of July the weather was fair, and the wind NW. By degrees it changed to a north wind, and then a strong, cold, N by E, and finally on the 3d, 4th, and 5th, a NE, accompanied by some rain. On the 13th of the same month, a similar course of changes commenced. In the afternoon of the 14th, a strong, cold NE prevailed, and during the 15th and 16th, the wind stood NNE.

This oscillation of the wind between the NW and NE, through he north, has been a common thing during the year; while hitherto the vibration between those points has been through the south.

A very severe drought continued through the month of July. We had no "rainy" half day between the 10th of June and the 14th of August; and from the first of these dates to the 10th of August, the earth was visited with but a few slight showers.

Observations have been made at two different times at this place, upon the magnetic meridian. In 1843, June 15th, the variation of the needle was 7° 28′ W. In 1849, May 2d, the variation was 7° 10′ W.

The zodiacal light is a phenomenon for which I watched at the appropriate times in the spring and fall, but I was at no time able to discern it.

The foregoing meteorological observations and remarks are for the use and consideration of the Regents.

Respectfully submitted.

A. WINCHELL.

AMENIA SEMINARY, *March* 7, 1850.

Dr. T. R. BECK.

Dear Sir: In the remarks which are appended to the meteorological report forwarded to you with the annual report of this Institution, I have stated that observations have been made twice on the magnetic meridian of this place. The variation of the needle as ascertained from the second observation, is said to have been 7° 10′.

From what I have ascertained since sending that report, I am convinced that the above mentioned observation was inaccurate. In February I made two independent observations on the magnetic meridian, in the following manner:

Having driven two posts firmly in the ground, in an east and west direction, and nailed a board about three feet long across the tops, so as to be in a horizontal position, and having fastened a compass sight upon a separate, smaller piece of board, I waited till about the time of the western elongation of the polar star in the evening, when by the help of assistants to manage lanterns, I brought the compass sight to range with the north star, and a plumb line about fifteen feet distant, and swinging in a pail of water to avoid agitation from the wind. Having adjusted the compass sight and observed the star moving to the east below the pole, the small board was tacked with nails previously prepared, to the larger board, and a stake erected in the direction of the plumb line. In the morning a compass was placed accurately on the line of the stake, plumb line and compass sight, and the direction of the needle to the west of said line, was read from the compass to five minutes of a degree, and found to be 6° 5′.

The next night a similar but entirely independent observation was made, and the above angle found to be 6° 10′. The average of these two was 6° 7′ 30″. Taking now the polar distance of the north star from the Nautical Almanac, and considering the latitute of the place to be 41° 48′, the azimuth of the star was found by trigonometry to be 1° 59′ 43″. Adding this to the angle between the magnetic meridian and the star, gave 8° 7′ 13″, as the variation of the needle.

I was not certain that this fact would be of any importance to you in your forthcoming report, but it occurred to me that as it is the interests of science which you are aiming to promote, and as you have published in the other reports, observations which related to time not covered by those reports, you might insert the result of the above observation, although it falls without the year 1849. I have given a description of the manner of taking the observation, that you might know the extent of its reliability.

Very respectfully,

A. WINCHELL.

Institution for the Deaf and Dumb,
New-York, January 25, 1850.

METEOROLOGICAL OBSERVATIONS.

I. Progress of Vegetation.

1849. 1. *Plants in flower.*

April 2. Poplar, Willow, Myrtle.
4. Violets (blue), Tulip.
8. Dwarf Pink, (or Phlox Subularis) White Maple, Elm, Jonquil.
9. Magnolia, Red Maple.
12. Apricot, Shepherdspurse.
20. Currant, Gooseberry, Cherry, Saxifrage.
23. Peach, Primrose, Dandelion.
24. Bluebell, Spring Beauty, Violet (Cucullata.)

May 5. Pear, Narrow Leaved Plantain, Veronica, Flowering Almond.
11. Apple, Columbine, Yellow Rose.
15. Lilac, May Apple, Horse Chestnut.
17. Hawksbill Geranium, Wood Sorrel, Fleabane, Viburnum, (Lantanoides.)
22. Laburnum, Snowball, White and Red Clover, Sorrel.
30. Peony, Syringa, White Daisy.
June 2. Choke Cherry.
15. Magnolia glauca, Locust.
18. Tulip tree, Elder.

2. *Fruits Ripe.*

June 18, Cherries, Currants, Strawberries.
July 30, Apricots, Peaches, Apples, Tomatoes.
Aug. 27, Grapes.

3. *Miscellaneous.*

Jan. 19, Zodiacal light very brilliant for half an hour.
Feb. 15, Zodiacal light very brilliant for an hour.
March 11, Sparrows heard.
12, Ploughing in field.
13, Bluebirds heard.
17, Frogs heard,
18, Ponds free from ice.
20, First steamboat from Albany, (Columbia.)
22, Zodiacal light, fine and bright, an hour.
22, Robins heard.
April 6, At 9 A. M. a narrow white cloud stretched across the NE portion of the heavens, about 3 degrees above the horizon, about one degree in width in the widest part, which was in the centre, it extended from SE to N.
26, Swallows first heard.
May 17, The steamer Empire sunk, by collision with a schooner, many lives lost.
June 3, A parhelion, about 10 degrees S of the sun, at the same height—when first seen, about the apparent size of the sun, but changed its form till it was more than twice as long as it was broad--a thin cloud had passed over the sun, after about 10 minutes the cloud dispersed and the sun shone brightly, and in about half an hour clouds came up from the ocean and obscured both.

June 26, Zodiacal light, very bright, continued till 9.15 P. M.
July 12, Shooting stars in the evening.
Sept. 2, At 6 P. M. a long cloud, very narrow and stratified, extended from E to W across the southern horizon, at an elevation of about 10 degrees in the S ; wind very light, NW ; smoky sunset.
Oct. 15, First frost, not very much.
31, A few flakes of snow fell in the afternoon.
Nov. 1, Ice on ponds this morning.

II. Atmospheric Phenomena.

Aurora Borealis.

Jan. 22, At 10 P. M. not very bright, a steady white light covering the northern portion of the heavens.
30, At 9 P. M. a steady white light.
Feb. 19, At 9 P. M. a long band of white light across the northern heavens.
21, At 10 P. M. a slight, but steady light.
March 18, At 7 P. M. white, two bands across the northern horizon, then streamers, and finally a steady light.
April 25, At 9.30 P. M. a band of white light about 10 degrees above the horizon, at the middle, stretching from a little east of north to south of west, at which points it fell below the horizon, surmounted by a very dark zone—stars shone through both, a very slight haze prevailed.
Sept. 7, At 8 P. M. a steady, white light over the whole northern portion of the horizon.
16, At 9 P. M. a bright steady light, with a dark zone below.
18, At 8 P. M, a long column of white light, W of N, about half an hour.
19, At 9 P. M. a steady white light above a dark zone.
20, At 8 P. M. a faint, steady white light.
Oct. 4, At 9 P. M. a faint light, but steady.
20, At 9 P. M. to 11, a bright steady light, stretching across the whole northern horizon about 15 degrees in height, the upper edge very distinctly defined-somewhat curved, stars very distinctly seen through it.
Dec. 17, At 10 P. M. a faint light N W.

2. *Haloes.*

Jan. 1, Solar halo at 10 A. M. continued an hour or more.
1, Lunar halo at 7 P. M., large, to 9 P. M.
7, " 9 P. M., large, to 10 P. M.
Feb. 1, " 7 P. M., quite large.
2, " 7 . 30 P. M.
4, " 8 P. M., small and some colored to 9 P. M.
March 31, " 8 P. M., large and distinct 8½ P. M.
April 7, " 10 P. M., large and well defined.
July 8, Solar halo at 12 M., highly colored.
Nov. 28, Lunar halo at 6 P. M., very large and distinct to 10 P. M.
Dec. 4, " 7 P. M., not very large, colored.
23, " 6 . 30 P. M., large, not very well defined.

3. *Rainbows and Sunsets.*

April 10, Rainbow at 6 A. M., wind S E at the commencement of a rain, very red in the east, at the same time.
Aug. 10, Rainbow in the N E after a thunder shower at 4 P. M.
Sept. 6, Two rainbows in the E at 5 . 40 P. M., before a slight shower, one perfect and bright, the other partial and dim.

4. *Lightning without thunder.*

May 4, From 6 to 9 P. M., some rain in the night.
July 21, In the night, at the southwest.
Aug. 9, From 6 . 30 to 9 P. M., S and S W.

5. *Thunder Showers.*

June 4, In the night, short and not very heavy.
22, About 9 P. M., at the N, but within sight.
23, 2 P. M., at the S, but within sight.
24, 5 P. M. and evening, S, but within sight.
July 14, 2 P. M., S, but within sight.
26, 7 to 8 P. M., heavy, lightning struck in Brooklyn.
31, 12 . 40 P. M., heavy rain for one hour.
Aug. 4, 7 . 30 P. M., much thunder and lightning.
4, 8 . 40 P. M., much thunder, not very heavy.
10, 2 . 30 P. M., not heavy, nor much, light rain.
23, In the night, heavy thunder.
31, 4 P. M., not heavy, but much rain for 20 minutes.

Sept. 26, 7.30 to 10.20 P. M., not much rain.
Oct. 23, 8 P. M., not much rain, 20 minutes.
Nov. 8, 7 P. M., " 1 hour.
9, 5 P. M., " half an hour.

6. *Snow Storms.*

Jan. 5, Three or four snow squalls in the afternoon, slight.
31, Commenced in the night, wind N E, and continued till 1 P. M. of the
Feb. 1, Not very fast, when the wind changed to N W, about 1½ inches.
2, Commenced 7.30 A. M., wind S W, continued to night, when it rained.
4, Commenced in the night, wind N E, continued to 12.30 P. M. of the
5, Some of the time quite fast, about 8 inches.
6, Commenced 3 P. M., wind N E, continued to 6 P. M., quite light.
8, Commenced 7 P. M., wind S W, continued light for a few minutes.
12, Commenced 10.30 A. M., wind N E, continued to 12 M; 3 inches.
13, Commenced in the night, wind N W, slight.
18, Commenced in the morning, wind N W, continued till night; 2 inches.
20, Commenced 3 P. M., wind N E, continued to 10 P. M.; 1 inch.
22, Commenced 3 P. M., wind N E, continued to 9.40 P. M.; ½ inch.
25, Commenced 1 A. M., wind N E, continued to 7 A. M., changed to rain.
March 2, Commenced 4 P. M., wind N E, continued to 8 A. M. of the 3d; 2 inches.
6, Commenced 2 P. M., wind N E, began rain then hail, and then snow, *light.*
14, Commenced 11.45 A. M., wind N E, then snow and hail, and rain, misty.
26, 10.20 P. M., wind N W, continued to 1 P. M. changed to rain; 3 inches.
Dec. 2, Commenced 5 P. M., wind N E, snow and hail till 9 P. M., then rain; 2 inches.
8, Commenced 6 A. M., wind N W, very slight for an hour or more.

10, Commenced 5 P. M., wind W, continued in the night, 5 inches.

25, Occasional flurries during the day.

28, Commenced 10 P. M, wind W, continued to 12 M, changed to rain; 2 inches.

30, Commenced 9.30 P. M., wind W, continued to 5 A. M.; 4 inches.

24, Commenced in the night, wind N W, continued to 7 A. M., slight; 1 inch.

7. WEATHER BEFORE AND AFTER AURORAS AND HALOES.

1849.		Auroras and Haloes.	Wind	Storm preceding.	Storm succeeding
Jan.	1,	Solar halo,........	W	Second day snow,	Fourth day after, snow.
	1,	Lunar halo,.......	W	do do	do do do
	7,	do	N	do do	Sixth do rain,
	22,	Aurora,...........	SW	Fith do rain,	Third do do
	30,	Aurora,...........	NW	Day before do	Second do snow.
Feb.	1,	Lunar halo,.......	SW	Same day snow,	Day after do
	2,	do	SW	do do	Third day do
	4,	do	SW	Second do	Day after do
	19,	Aurora,...........	NW	Day before do	do do
	21,	do	NE	do do	do do
March	18,	do	NW	do rain,	Seccond day after, rain,
	31,	Lunar halo,.......	NW	do do	Fifth do do do
April	7,	do	SE	Second day do	Third day do do
	25,	Aurora,...........	SE	Day before do	do do do
June	3,	Parhelion,.........	SE	do do	Day after do do
July	8,	Solar halo,........	SW	do do	Twelfth day do do
Sept.	7,	Aurora,...........	W	do do	Tenth do do do
	16,	do	SE	Tenth day do	Day after do
	18,	do	NW	Day before do	Fifth day do do
	19,	do	NW	Second day do	Fourth day do do
	20,	do	NE	Third do	Third do do do
Oct.	4,	do	NE	Same do	Day after do
	20,	do	W	Day before do	do do
Nov.	28,	Lunar halo,.......	W	Second day do	Fourth day do do
Dec.	4,	do	NW	Day before do	Day after do
	17,	Aurora,...........	NW	do do	Second day do do
	23,	Lunar halo,.......	NW	do do	Day after, snow.

Auroras observed,------------------------------	14
Solar haloes,------------------------------	2
Lunar haloes,------------------------------	10
Parhelion,------------------------------	1

9. Results of Barometrical Observations.

1849.	Morn.	Afternoon	Evening,	Mean.	Highest.			Lowest.			Range.
January,	30.247	30.557	30.247	30.35	30.73	on the	12th	29.72	on the	5th,	1.01
February,	30.25	30.225	30.26	30.245	30.74	do	21 & 28th	29.76	do	9th,	.98
March,	30.171	30.139	30.154	30.154	30.57	do	4 & 5th	29.63	do	21st,	.94
April,	30.097	30.074	30.101	30.19	30.47	do	27th	29.33	do	19th,	1.14
May,	30.151	30.139	30.154	30.148	30.59	do	3d	29.64	do	13th	.95
June,	30.151	30.134	30.148	30.144	30.44	do	12th	29.85	do	8th,	.59
July,	30.208	30.201	30.22	30.209	30.39	do	24th	29.85	do	21st	.54
August,	30.153	30.137	30.153	30.147	30.37	do	29th	29.85	do	23d,	.52
September,	30.216	30.196	30.21	30.207	30.52	do	11 & 12th	29.73	do	23d,	.79
October,	30.119	30.098	30.128	30.115	30.49	do	21st	29.48	do	7th,	1.01
November,	30.119	30.097	30.111	30.109	30.41	do	16th	29.70	do	9th,	.71
December,	30.175	30.135	30.152	30.154	30.58	do	12th	29.69	do	23d,	.89

Highest,	30.74
Lowest,	29.33
Range,	1.41
Mean Range,	.87
Annual mean,	30.181

NORTH SALEM ACADEMY.

ABSTRACT *Of ten years observations of Barometer, Thermometer, &c., (from* 1840 *to* 1849 *inclusive) at North Salem.*

	1840.	1841.	1842.	1843.	1844.	1845.	1846.	1847.	1848.	1849.		
Barometer.												
Annual means,	29.461	29.432	29.461	29.439	29.462	29.449	29.457	29.471	29.462	29.493	29.458	average height of barom'r.
Highest degree,	29.89	30.06	29.95	30.03	30.07	29.91	29.93	30.02	30.05	30.06	30.07	highest in the whole period.
Lowest degree,	28.57	28.37	28.27	28.54	28.27	28.17	28.28	28.50	28.02	28.43	28.02	lowest " "
Range,	1.32	1.69	1.68	1.59	1.80	1.74	1.65	1.52	2.03	1.63	2.05	whole range.
Thermometer—Means.												
January,	18.36	29.21	30.45	33.99	20.58	29.89	28.69	28.25	31.60	22.96	27.38	average temp'r of January.
February,	30.22	22.05	35.23	20.15	27.22	28.41	23.70	27.09	25.34	20.97	26.04	" " Febr'ry.
March,	36.15	35.55	42.74	26.72	26.71	39.28	36.40	32.13	33.98	37.07	35.67	" " March.
April,	46.83	42.78	48.20	46.64	52.35	46.13	49.03	44.82	46.55	45.03	46.84	" " April.
May,	56.08	54.48	53.63	56.31	60.82	55.84	58.68	56.73	59.91	53.97	56.64	" " May.
June,	63.18	68.98	64.21	64.74	65.16	66.92	65.54	64.45	66.16	66.73	65.60	" " June.
July,	67.51	70.24	71.86	69.06	68.80	70.89	71.00	72.33	69.69	69.92	70.13	" " July.
August,	68.16	70.61	69.12	70.02	68.08	72.37	70.75	67.93	68.22	68.81	69.51	" " August.
September,	55.00	65.05	58.94	62.71	58.87	59.82	65.14	60.35	57.52	59.10	60.25	" " Septemb.
October,	48.75	44.37	47.87	46.60	47.96	51.09	47.70	46.82	49.27	48.99	47.94	" " Octob'r.
November,	38.84	35.08	35.88	36.67	38.83	42.46	44.62	43.31	34 99	45.54	39.62	" " Novem'r
December,	26.70	31.53	23.23	29.21	29.57	24.82	29.77	36.48	35.05	29.78	29.61	" " Decem'r
Annual means,	46.31	47.41	48.44	46.90	47.91	48.99	49.24	48.39	48.17	47.40	48.92	average of the whole period
Mean of winters,	24.29	25.98	32.40	25.79	25.67	29 29	25.73	28.33	28.37	26.32	27.22	average temp. of winter.
Mean of springs,	46.36	44.27	48.19	43.22	49.96	47.08	48.04	44.56	46.81	45.36	46.38	" " spring.
Mean of summers,	66.28	69.94	68.39	67.61	67.35	70.06	69.06	68.24	68.02	68.48	68.34	" " summer.
Mean of autumns,	47.53	48.17	47.56	48.66	48.56	51.12	52.49	50.16	47.27	51.21	49.27	" " autumn.
Highest degree,	95	102	96	92	92	100	96	95	93	95	102	highest in the whole period.
Lowest degree,	—15	—18	—7	—6	—6	—4	—5	—10	—2	—15	—18	lowest "
Range,	110	120	103	98	99	104	101	105	95	110	120	whole range.

ABSTRACT—(CONTINUED.)

	1840.	1841.	1842.	1843.	1844.	1845.	1846.	1847.	1848.	1849.	
Weather.											
Days clear, ...	205	197½	206½	193	216½	236	219	214½	224½	212	
Days cloudy, ...	161	167½	158½	172	149½	129	146	150½	141½	153	
Days rain, ...	66	82	97	73	73	68	75	66	58	67	
Days snow, ...	17	23	13	20	11	14	11	17	16	16	
Days snow and rain, ...	9	8	4	3	7	5	5	5	2	6	
Rain gage, ...	37.38	39.78	45.72	50.17	37.30	39.50	45.67	44.80	35.65	42.57	41.85 average of rain.
Inches of snow, ...	38.00	64.00	29.00	74.75	27.00	31.25	47.50	40.75	56.25	28.00	
Number of thunder showers	9	21	18	9	20	14	19	11	13	6	
Latest frost in spring, ...	June 9,	May 31,	June 11,	June 1,	May 23,	May 31,	May 22,	May 28,	June 1,	May 16,	June 11, latest frost.
Earliest in autumn, ...	Sept. 13,	Oct. 1,	Sept. 23,	Sept. 28,	Sept. 24,	Sept. 22,	Oct. 11,	Sept. 16,	Sept. 17,	Oct. 9,	Sept. 14, earliest.
No. days exempt from frost.	96	122	103	118	123	114	141	110	107	145	
Earliest snow, ...	Oct. 26,	Oct. 4,	Nov. 24,	Oct. 23,	Nov. 28,	Nov. 30,	Nov. 25,	Nov. 13,	Nov. 12,	Dec. 2,	
Number of auroras, ...	11	16,	7	3	1	6	7	6	15	6	78 auroras in all.*
Prevailing wind, ...	NW	NW	SW	SW	SW.	SW	SW	SW	NW	NW	SW prevailing wind.

* A few Auroras were omitted by mistake, in tables previously given.

ABSTRACT—(Continued.)

	1840.	1841.	1842.	1843.	1844.	1845.	1846.	1847.	1848.	1849.
Vegetation.										
Violets in bloom,	April 15,	April 11,	March 30,	....	April 20,	April 6,	April 20,	April 28,	April 24,	April 11,
Dandelion,	" 16,	" 11,	April 3,	May, 1,	" 16,	" 9,	" 10,	" 22,	" 13,	" 12,
Shadblow,	" 25,	May 9,	" 17,	" 4,	" 16,	" 22,	" 23,	May 5,	" 26,	" 29,
Cherry trees,	" 25,	" 11,	" 17,	" 8,	" 24,	" 25,	....	" 8,	" 29,	May 7,
Plum,	" 25,	" ..	" 20,	" 9,	" 24,	" 28,	April 29,	" 10,	May 5,	" 5,
Peach,	....	" ..	" 16,	" 9,	" 23,	" 16,	" 23,	" 7,	April 22,	" 12,
Strawberries,	May 12,	" 9,	" 22,	" 10,	" 27,	" 29,	" 23,	" 8,	" 30,	" 10,
Apple trees,	April 28,	" 18,	" 22,	" 13,	" 27,	" 29,	" 28,	" 13,	May 7,	" 19,
Corn planted,	May 3,	" 13,	May 3,	" 9,	May 8,	May 5,	....	" 13,	" 8,	" 11,
Lilac in bloom,	" 5,	" 23,	" 7,	" 16,	" 5,	" 9,	May 4,	" 16,	" 9,	" 22,
Dogwood,	" 11,	" 27,	" 10,	" 24,	April 28,	" 6,	....	" 19,	" 7,	" 31,
Quinces,	" 17,	" 26,	" 9,	" 19,	May 12,	" 14,	May 12,	" 25,	" 22,	" 20,
Peas,	" 20,	June 13,	June 13,	June 10,	June 2,	June 4,	" 21,	June 7,	June 9,	June 7,
Rye harvest,	July 7,	July 12,	July 14,	July 13,	July 8,	July 9,	July 9,	July 16,	July 10,	July 16,
Cherries ripe,	June 13,	June 18,	June 16,	June 21,	June 8,	June 11,	....	June 13,	June 15,	June 22,
Blackberries ripe,	July 7,	July 17,	July 7,	July 18,	....	....	July 6,	July 11,	July 4,	July 14,
Green corn,	....	August 5,	....	Aug. 16,	....	Aug. 10,	Aug. 4,	Aug. 8,	Aug. 5,	Aug. 7,
Birds, Insects, &c.										
Bluebirds,	Feb. 17,	March 9,	March 1,	March 4,	Feb. 28,	Feb. 21,	March 14,	March 7,	March 8,	March 12,
Robins,	" 19,	....	Feb. 25,	....	March 10,	" 21,	" 5,	" 7,	" 7,	" 13,
Barn Swallows,	April 17,	April 17,	April 9,	April 13,	April 13,	....	April 18,	April 24,	April 30,	April 9,
Whippoorwills,	" 19,	....	" 25,	June 10,	" 30,	April 23,	May 3,	May 15,	May 5,	May 4,
Bobolinks,	May 7,	May 8,	May 8,	May 8,	May 9,	May 4,	" 1,	April 30,	" 10,	" 9,
Cliff Swallows,	....	....	....	.... [*]	....	....	April 28,	" 21,	April 27,	April 29,
Wild Geese,	March 3,	March 23,	Feb. 24,	April 8,	....	....	March 26,	March 6,	March 27,	March 20,
Frogs,	" 2,	....	March 4,	" 13,	April 3,	Feb. 22,	" 25,	" 30,	" 21,	" 24,
Butterflies,	April 30,	March 28,	" 10,	May 11,	May 11,	" 22,	....	April 7,	April 22,	April 20,
Fireflies,	May 18,	June 5,	June 5,	June 3,	" 19,	May 26,	May 13,	May 29,	May 17,	June 3,
Locusts,	August 4,	July 25,	....	July 23,	....	Aug. 16,	Aug. 5,	Aug. 6,	Aug. 4,	Aug. 5,
Katydids,	....	August 18,	Aug. 23,	....	....	Aug. 13,	" 13,	" 18,	" 19,	" 17,

[*] Their first appearance in this vicinity. These must be the "Hirundo fulva" of the State Ornithology; but they arrive here the latter part of April, and do not leave till the latter part of August. Their numbers increase annually

The mean of the barometer is higher for the last year, than for either of the preceding nine, and the temperature has been rather below the average; while the rare occurrence of electrical phenomena indicates an unusual state of the atmosphere during the summer months.

The coldest month during the 10 years was Jan. 1840, though Feb. is usually the coldest of the year.

The warmest month was Aug. 1845; but the average temperature of July, slightly exceeds that of August.

The most rain that fell in any one month was 8.74 inches, in Aug. 1843. The least quantity was .35, Sep. 1846.

The 78 Auroras that were recorded were distributed among the several months as follows:

Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sep.	Oct.	Nov.	Dec.
9	13	6	10	6	2	2	4	6	9	7	4

JOHN F. JENKINS.

Results *of Barometrical Observations made at sunrise, noon and* 9 *P. M. daily, for the year* 1819.

(By John F. Jenkins, Principal of North Salem Academy.)

				Mean.	Highest.		Lowest.		
January, ...	29.528	29.523	29.542	29.536	19th,	30.06	5th,	28.92	1.14
February,..	.547	.532	.538	.538	30th,	30.02	9th,	29.06	.96
March,.....	.485	.474	.463	.474	23d,	29.84	21st,	29.00	.84
April,......	.421	.420	.415	.419	27th,	29.80	19th,	28.69	1.11
May, ...	.493	.497	.471	.487	3d,	29.88	14th,	28.99	.89
June, ...	.512	.520	.502	.511	18th,	39.79	8th,	29.22	.57
July,.......	.578	.586	.583	.582	24th,	29.75	1st,	29.20	.55
August, ...	.515	.526	.517	.520	27th,	29.68	15th,	29.26	.42
September,.	.543	.551	.537	.544	10, 11th,	29.85	23d,	29.08	.77
October, ...	.421	.424	.438	.428	26th,	29.75	7th,	28.81	.94
November,.	.413	.444	.422	.436	16th,	29.72	9th,	29.07	.65
December, .	.458	.432	.430	.440	12th,	29.85	22d	28.43	1.42
An. means,	29.495	29.494	29.488	29.493	Highest degree,			Jan. 18,	30.06
					Lowest "			Dec. 22,	28.43
					Annual range,..........				1.63

Haloes and Parhelia.

Dates.		1849.	Succeeding weather.
February	5,	Lunar,..............................	Snow in 6 hours.
March	10,	"	Fair 3 days.
May	1,	Solar, 11 A. M.,..........................	Fair 2 days.
"	1,	Lunar, 8 P. M.,..........................	" "
"	26,	Lunar,..............................	Cloudy.
"	27,	Parhelion, 4 P. M.,......................	Rain 2d day.
June	20,	Solar, with prismatic colors, 11 A. M.,	Fair 3½ days.
July	25,	Solar, 11 A. M.,..........................	Rain next day.
August	27,	Lunar,..............................	Rain 2d day.
September	24,	"	Fair several days.
October	28,	"	Rain in 12 hours.
November	29,	"	Cloudy.
December	23,	"	Snow in 9 hours.
"	28,	"	Snow in 5 hours.

THUNDER SHOWERS AND SNOW STORMS. 1849. (*North Salem.*)

THUNDER SHOWERS.

Date.	Hour.	Accompanying wind.
June 4,	6 P. M.	NW high.
" 24,	4¾ P. M.	S
July 31,	12 M.	NE
August 10,	3 P. M.	SW
Oct. 23,	8¼ P. M.	NW high.
Nov. 8,	1 A. M.	NE

6 Showers.

DISTANT THUNDER.

Date.	Hour and direction.
May 14.	2 P. M. SW.
July 9,	4 P.M. NW&NE
" 20,	4&6½ P. M. NW
Aug. 9,	In the night SW
" 23,	8 A. M. NW
" 29,	5 P. M. W
Nov. 8,	9 P. M. NE&SE

Distant Thunder 7 times.

SNOW STORMS.

Date.	Beginning.	Accompanying wind.	Duration. Hours.	Quantity. Inches.
Jan. 30.	6 P. M.	SW	4	1
Feb. 1,	Midnight,	NE	7	2
2,	Morning,	SE	5	1½
5,	Midnight,	N	11	2½
6,	2½ P. M.	SE	3½	1
12,	Night,	NE	5	1
18,	Night,	N&NE	14	4
22,	5 P. M.,	NE	6	1
25,	Night,	NE	5	¾
Mar. 2,	6 P. M.,	NE	8	1½
26,	9 P. M.,	N&NE high	15	4
Dec. 2,	7½ P. M.,	NE	5	1
22,	11 P. M.,	W high,	2	1
24,	Before day,	E	5	¾
29,	Night,	SE	5	3
31,	Midnight,	NW	6	2

16 Snow Storms. Inches of Snow,...... 28

JOHN F. JENKINS.

AURORAS, 1849.

DAYS BEFORE.									Dates of Auroras.	DAYS AFTER.								
Barometer.			Thermometer.			Weather.				Barometer.			Thermometer.			Weather.		
3d.	2d.	1st.	3d.	2d.	1st.	3d.	2d.	1st.		1st.	2d.	3d.	1st.	2d.	3d.	1st.	2d.	3d.
29.92	29.70	29.52	8	32	42	F. F.	C. C.	R. C.	Jan. 14,	29.40	29.59	29.36	36	32	33	C. R.	F. F.	C. F.
.41	.38	.41	10	2	4	F. F.	F. F.	F. F.	Feb. 16,	.45	.52	.84	11	6	—1	F. C.	S. S.	F. F.
.84	.91	.96	—5	18	12	F. F.	C. C.	F. C.	" 21,	.88	.76	.67	26	32	41	C. S.	F. F.	F. C.
.37	.34	.32	38	44	34	C. F.	C. F.	F. F.	Mar. 18,	.57	.47	.07	33	45	43	F. F.	F. R.	R. R.
.21	.31	.60	50	46	43	F. C.	F. F.	F. F.	Oct. 14,	.69	.67	.61	47	55	60	F. F.	C. C.	C. R.
.22	.48	.66	34	28	29	C. C.	F. F.	C. C.	Dec. 8,	.43	.38	.56	33	33	25	R. C.	C. C.	F. F.
Fell........ 2 times. Rose....... 3 times. Stationary.. 1 time.			2 times. 4 times. 0 times.			Rain or snow on one day preceding.			6 Auroras observed dur. year.	Fell,...... 4 times. Rose,..... 2 times. Stationary. 0 times.			3 times. 3 times. 0 times.			Rain or snow on seven days following.		

Of the 66 Auroras observed during the last 10 years,
11 were preceded and 14 were followed by rain or snow within 24 hours.
22 " 24 " " 48 "
23 " 29 " " 72 "

JOHN F. JENKIN, *North Salem.*

OBSERVATIONS

Made during the heaviest storms of 1849, *by* John F. Jenkins, *Principal of North Salem Academy.*

RAIN STORM OF MARCH 20 AND 21.

Day.	Hour.	Baromet'r	Wind.	Force.	Therm'tr.	Weather.
Mar. 20	noon.	29.50	SW	3	50	Fair.
	2 P M	.44	S	3	53	Hazy.
	3	.42	"	3	51	Cloudy.
	5½	.40	"	4	48	Rain.
	9	.38	"	5	43	"
	11	.30	"	8	43	"
21	6 A M	.15	"	7	47	"
	8	.14	"	7	49	"
	9	.14	"	6	51	"
	10	.11	"	4	52	Cloudy.
	12	.06	"	5	53	"
	1 P M	.06	"	2	52	Foggy.
	3	.00	"	1	52	Rain.
	7	28.96	"	4	46	"
	10	29.00	NW	7	40	R. S. heavy
22	6 A M	.30	,,	2	31	Fair.

Rain 1.4 inch. Barometer rose rapidly afterward.

SNOW & RAIN STORM OF MARCH 26, 27, 28.

Day.	Hour.	Baromet'r	Wind.	Force.	Therm'tr.	Weather.
Mar. 26	noon.	29.44	NW	2	36	Cloudy.
	3 P M	.44	N	4	37	"
	9	.44	NE	5	33	Snow.
	night.	......	"	8	33	"
27	6 A M	.34	N	8	30	"
	9	.34	NW	6	30	"
	11	.33	"	7	30	"
	1 P M	.30	"	7	30	"
	2½	.27	N	8	31	Hail.
	3	.23	"	6	32	Rain.
	5	.22	"	6	34	"
	9	.21	NE	7	36	"
28	6 A M	.20	"	5	38	"
	10	.21	N	3	43	Cloudy.
	1½ P M	.23	NE	3	44	Rain.
	3	.28	"	3	45	Cloudy.

Rain 1.8 inch, including about 4 inches of snow. A very heavy storm; but the barometer fell less than usual, and rose while the wind was high and NE, in which point it remained durng the 29th.

RAIN STORM OF OCTOBER 6 AND 7.

Day.	Hour.	Barome'tr	Wind.	Force.	Therm'tr.	Weather.
Oct.	7 A M	29.45	NE	1	50	Rain, gent
	9	.45	E	1	51	" "
	12	.38	SE	3	52	" "
	3 P M	.28	E	4	53	" heavy
	6	.20	"	5	52	" ge'tle
	8	.13	"	7	51	" heavy
	10	.04	"	8	48	" heavy
	12	28.94	"	8	48	Cloudy.
7	5 A M	.86	NE	1	48	"
	6	.85	"	4	48	Rain.
	8	.83	"	3	47	Cloudy.
	11	.82	N	3	47	Rain.
	12	.81	N*b*W	1	47	"
	2½ P M	.83	NW	2	43	"
	5	.90	"	2	39	"
	8	29.00	"	2	39	Clearing.

Rain 2.3 inch. Barometer rose slowly.

OBSERVATIONS ON STORMS.—(CONTINUED.)

RAIN STORM OF OCTOBER 29.

Day.	Hour.	Baromet'r	Wind.	Force.	Therm'tr.	Weather.
Oct. 29	6 A. M	29.53	SE	3	58	Cloudy, ...
"	9	.49	"	2	61	"
"	11	.41	"	4	64	Rain gentle, .
"	12	.37	"	4	65	Cloudy, ...
"	1 P. M	.35	"	5	65	Rain gentle..
"	2	.30	"	5	65	Cloudy, ...
"	3	.27	"	5	65	"
"	4	.20	"	6	64	Rain heavy,..
"	5	.16	E	6	62	"
"	6	.10	SE	6	62	"
"	7	.06	"	6	62	"
"	9	28.97	"	7	62	"
"	10	.96	"	7	61	"
30	1 A.M.	.96	S	2	51	Cloudy, ...
"	2	29.00	W	4	51	"
"	7	.10	NW	4	47	Clearing, ...

Rain 2.12 inches.
Barometer rose slowly afterwards.

SNOW AND RAIN STORM OF DECEMBER 22.

Day.	Hour.	Barome'tr	Wind.	Force.	Therm'tr	Weather.
Dec. 21	10 P. M.	29.52	NE	1	27	Clear.
22	7 A M.	.34	"	3	31	Cloudy.
	10½	.19	E	4	32	Snow.
	11	.10	"	4	33	Sleet.
	1 P. M.	28.92	"	5	35	Rain heavy,
	2	.70	NE	6	35	"
	3	.60	"	6	36	"
	5	.48	"	5	39	"
	6	.43	"	4	39	Rain gentle
	7	.43	SW	4	43	Cloudy.
	8	.45	"	3	38	"
	9	.45	"	3	37	"
	11	.61	W	5	32	Snow.
23	3 A. M.	.62	"	6	28	Cloudy.
	6	.90	"	4	30	Clearing.
	9	.97	"	3	32	Clear.

Rain 1.25 including about an inch of snow.
Barometer rose very slowly.

GENERAL REMARKS.

January was cold, but presented more fair days than usual, and with good sleighing during the first half, was a pleasant month.

February was considerably below the average in temperature and very windy, with frequent falls of snow.

March was at first, cold. The latter half was milder than usual and wet.

April commenced and ended with pleasant weather; but was uncommonly cold about the middle of the month.

May was uncomfortable; cloudy, cold and wet. Vegetation backward.

June on the contrary was dry and hot. Vegetation about as forward as usual.

July had some very warm days, though not above the average as a whole. Crops somewhat injured by drought.

August in some measure made up for the dry weather of July, by several copious rains.

September was mild and pleasant, but somewhat dry.

October was warmer than usual, with several heavy storms of rain.

November was very pleasant; the warmest Nov. in ten years.

December was of the usual temperature of that month, but had a greater proportion than common of cloudy weather.

Crops of hay and grain were abundant.

Potatoes suffered from drought, but not at all (in this town,) from the disease that has affected them for several years past.

It has been a year of general health.

JOHN F. JENKINS, *North Salem.*

ROCHESTER COLLEGIATE INSTITUTE.

METEORIC PHENOMENA.

1849, Jan. 25. Slight rain through the day. The barometer fell far more than the rain indicated. The wind had been S E through the day, passed to S and S W in the evening, and blew almost a gale till morning—grew less towards noon, and a calm followed; barometer rose rapidly, indicating the rapid change to fair weather; The Genesee rose rapidly and became high, and the ice moved off the river in the city on the 27th, a little farther up on the 28th, and a large quantity came down from the south on the 29th.

The public papers soon gave the information that much rain had fallen at the south, and that the storm was heavy in the mountainous parts of Pennsylvania and southern western New-York.

I had observed before, that the barometer often falls very much here when the principal storm is at the distance of one hundred and even two or more hundred miles. We seem in such cases to be on the exterior verge of the storm so fully indicated by the barometer.

The same indications were evident in the two days now to be noticed.

Jan. 31. Cold day and evening, wind N E; at 10 P. M. the wind passed to south and S W, and rose high; barometer about 30 inches all day.

Feb. 1. Weather had become warmer by S W wind; barometer fell rapidly since last night, and high wind came on with clouds—wind diminished—barometer rose rapidly, cleared, and the storm of hail, rain and snow was soon over. C. DEWEY.

Nov. 2. Passing from Lewiston down Lake Ontario, the sky being slightly hazy and some light clouds, there were extensive radiations of light on every side upwards from the sun for more than an hour before sunset.

It was clear that these radiations do not depend on the sun's being below the horizon, but on the state of the atmosphere, or rather, on the haze or form of vapor in the atmosphere.

Two years ago I saw similar radiations on all sides from the sun at two o'clock P. M. The sky was dull, but the radiations made the amount of vapor and haze most obvious. Still, the radiations were in distinct lines as they commonly appear. C DEWEY.

Nov. 30. Splendid lunar halo near 8 o'clock P. M. The moon was near the full, and was passing behind fleecy clouds. Two circles had the moon in their centre, each brilliant red on their outer circumference, and passing inwards through the three or four next primary colors. The inner circle had a radius of about three diameters of the moon, and the outer circle had about double that diameter. A little while after similar clouds, but nearer the earth, passed over the moon without any such halo.

The common solution for such halos is the passage of light through minute ice-crystals high in the atmosphere. Vapor doubtless rises above the point of congelation. C. D.

Results of an Ice Shower.

The following fact was learned since the Report made for 1848.

Near Portage in Dec , 1848, happened an *Ice Shower*, as the people familiarly call it, for such have been previously known in that part of our State. There fell in the day a heavy wet snow which adhered to the trees, and by the cold of the following night was frozen fast upon them. The weight was so great as to bend down the younger trees to the ground, and their tops were frozen to the earth. Some of these recovered, after the melting of the snow, their upright position, but many are still to be seen bent over towards the earth. Great numbers of large trees were broken off a few feet from the ground, as pines, hickory, maple, ash, &c. There was not much wind after the freezing to produce this fall of those trees, but many seem to have broken off from the great weight of snow pressing on the trunks, which were not perpendicular. The effects have been fully visible the past year, and the injury was great to the forests. The *Ice Shower* extended more than twenty miles in length and several miles in width. C. D.

The *Ice Storm* occurred on Dec. 6, 1848, and extended 20 miles in length, and in breadth entirely across the Genesee Valley and up the adjoining slopes.

Result *of Thermometrical Observations, made at Rochester, at 7 A. M., 2 P. M. and 9 P.M. for the year* 1849.

(By C. Dewey.)

MONTHS.	MEAN.		Monthly Mean.	HIGHEST.		LOWEST.		Monthly Range.
	1st half.	2d half.		1st half.	2d half.	1st half.	2d half.	
January,	18.67	25.49	22.29	43	50	—9	+8	59
February,	20.94	23.35	22.15	41	52	—1	—5	57
March,	31.58	37.81	35.12	56	58	+16	20	42
April,	43.26	44.33	43.80	76	77	20	26	57
May,	48.69	58.46	53.73	72	86	36	43	52
June,	64.47	73.26	68.86	86	94	50	62	44
July,	71.16	71.71	71.44	95	94	53	56	42
August,	67.47	71.50	69.06	90	90	58	57	42
September,	63.64	59.12	61.38	86	81	49	42	44
October,	49.44	48.06	48.73	66	73	36	31	42
November,	50.04	42.60	46.32	73	61	30	27	46
December,	29.71	26.94	28.28	42	46	17	2	44

Mean of year, ... 47.59
Range of year, ... 104

Note.—From absence, I am obliged to an observer at another place for the means for some days. This may give the mean of year a little too high.

RESULT *of Observations on the Barometer at Rochester, twice a day, at the hours of 7 A. M. and 9 P. M.*

(BY C. DEWEY.)

MONTHS.	MEAN.		Monthly Mean.	FIRST HALF.		SECOND HALF.		Monthly Range. Inch.
	1st half.	2d half.		Highest.	Lowest.	Highest.	Lowest.	
January,	29.70	29.74	29.72	30.27	29.36	30.28	29.03	1.24
February,	29.49	29.84	29.67	29.91	29.07	30.15	29.51	1.08
March,	29.61	29.62	29.61	30.05	29.31	29.85	28.90	1.15
April,	29.60	29.49	29.55	29.90	29.15	29.90	29.00	0.90
May,	29.56	29.58	29.57	30.10	29.03	29.75	29.23	1.07
June,	29.55	29.59	29.57	29.76	29.28	29.85	29.38	0.47
July,	29.67	29.57	29.62	29.92	29.48	29.88	29.32	0.60
August,	29.54	29.67	29.55	29.72	29.15	29.54	29.37	0.57
September,	29.75	29.44	29.59	29.96	29.84	29.40	29.10	0.86
October,	29.43	29.54	29.48	29.83	29.08	29.90	28.93	0.97
November,	29.52	29.44	29.48	29.85	29.16	29.83	29.13	0.72
December,	29.52	29 54	29.56	30.12	29.10	29.93	29.02	1.10

Mean of year,	20.57
Range in year,	1.37 inch.

NOTE.—The means for a few days were from another place, owing to my necessary absence.

I have had the opportunity of comparing this barometer with a standard from Europe, and with one manufactured with much care under the direction of the Smithsonian Institute, and of ascertaining that the difference between the three is very little.

Thunder Shower, June 2d, 1849.—The afternoon had been showery; early in the evening a tremendous shower burst upon this city and the vicinity. The lightning and thunder were incessant, crashing and terrific. The lightning struck in more than a dozen places in the city, besides the striking in adjoining towns. One house in Gates, two miles west of the city, was struck three times, standing on a beautiful rise of ground, sandy and dry. The guilding on the frame of a picture of Washington was scattered over the glass and much discolored, but it was not otherwise injured.

In Greece, seven miles from the city on the Ridge Road, where the storm was very heavy, the lightning appeared to blaze on the tire of travelling carriages, or to make the wheels in a blaze of light. In two cases the persons were so frightened by the appearance that they sought and obtained shelter for the night at the nearest dwelling, so great was their terror.

I have never known a people so terrified and awe struck by a thunder shower as in this city. It will long be spoken of as *the* thunder storm. Not a few lightning rods were soon erected in the city, though adequate protection requires many more.

Since the preceding was written, I have learned another fact.

An intelligent gentleman was riding in this shower from Mount Morris to Geneseo, and for a mile or two the wheels of his buggy were streaming with electricity, actually bright and flashing, and appearing to pass across the dash-board from side to side.

Was the electricity so abundant that the friction of the wheels on the earth accumulated it, or was it passing from the earth to the atmosphere above? The *Fire at St. Elm,* as it is called, is thus produced, by the electric fluid passing from the earth upwards, and showing itself on the masts and shrouds of a ship, on fences, posts and small trees, from the difficulty of passing through the air. I have never heard of it before on the wheels of a carriage, though I have known it on persons riding in a sleigh, on the manes and ears of horses; on stakes and shrubs and fences. C. D.

Fogs rare in Rochester—Uncommon Formation.

Fogs, such as rise from low swampy ground, from ponds and many rivers, rising from the surface and densely covering the earth to some distance above, never are formed along this part of the Genesee. The valleys of the Connecticut, Housatonic and Hudson, are often covered for great distances by such fogs. Here, they never appear. The last year, has been thick fog over this city two or three times. They have been produced by the settling down to the earth of the vapor from above. It spreads from Lake Ontario in the form of a *stratose* cloud, which gradually settles down till the city and surrounding country is enveloped in a dense fog. Sometimes such a cloud comes within a few hundred feet of the earth, from which the light of a fire or of a furnace is beautifully reflected, but no fog appears at the surface of the earth. In all these cases, the vapor rising from the Lake, appears to be condensed by coming into a colder atmosphere till its weight brings it towards or down to the surface or ground. C. D.

" *Coronation of Winter.*"

Rev. Dr. Hitchcock, President of Amherst College, gave this title to a discourse on a splendid ice phenomenon sometimes seen in winter. I have lately learned from an intelligent witness of this phenomenon in the adjacent town of Mendon in this county, another instance of its appearance. In the winter a rain fell in considerable quantity, and congealed on the forest trees in icicles and fine crystals in the evening and night. Next morning was cold, and the trees were loaded with ice. As the sun shone on the forest, the whole was resplendent with the prismatic colors. No language can describe the splendor of the scene. C. D.

Height of Various Places.—I have taken pains to ascertain the level of some places south of us, derived from the records of the canal survey, and starting from the bottom of the Erie canal, at Rochester.

Level of some places South of Rochester.

From Rochester to Mt. Morris,	96		feet.
" Mt. Morris to Deep Cut,	529	8	"
" Deep Cut to Canadea,	103	8	"
" Canadea to Summit,	252	0	"
Ascent,	981	6	"
" Summit to the Allegany at Olean,	86	0	"
" Olean above Rochester,	895	6	"
" Rochester to tide-water, descent,	606	0	"

C. D.

Monthly variation in the level of Lake Ontario, measured from the surface of the dock downwards at the mouth of Genesee river, by H. T. Spencer, Esq.

1849.

January 1,	3	feet	2	inches below
February 1,	3	"	2	"
March 1,	3	"	4	"
April 1,	2	"	10	"
May 1,	2	"	0	"
June 1,	1	"	9	"
July 1,	2	"	8	"
August 1,	2	"	3	"
September 1,	2	"	9	"
October 1,	2	"	2	"
November 1,	2	"	2	"
December 1,	2	"	5	"
December 31,	2	"	9	"

By comparison with the reported heights for 1847 and 1848, it seems that the Lake is highest in the summer months, when the melted snows and spring rains have poured their discharge from the upper lakes into Lake Ontario. In 1848 and 1849, the Lake was high in December from great amount of the rain of the autumnal months.

C. DEWEY.

Ice on Lake Ontario.

The great depth of this lake prevents the formation of ice to any distance from the shore, as it does not become enough reduced in temperature till March or April. Then, if there should be a considerable depression of the temperature of the atmosphere, ice may be formed over a small part of the surface of the lake. But this is rare. I stated to the Regents on a former occasion, that in March 1836, the lake froze from Niagara to Toronto, about thirty-six miles, so that ice extended forty or more miles from the western shore.

I have just learned from H. T. Spencer, Esq., who resides at the mouth of the Genesee, that the same fact occurred on Sabbath night, April 8th, 1849, and that the ice three-eighths of inch thick, extended from Niagara to Toronto.

From observations I reported to the Regents in 1838 it was seen that the temperature of the lake was only four degrees above freezing point in the middle of May, for many miles in the middle part of the lake.

C. DEWEY.

The Year—Productions.

The year 1849 has been highly productive in vegetable life. The crops of grain and hay have been generally large, and the yield in Western New-York considerably above the average.

The quantity of peaches, plums, cherries and apples has been far less than usual. The apples were few over a large extent of the State and of some other states. The failure was not owing to the long severe weather of February, for the trees were abundant in blossoms, but to the cold and heavy rain in the last of May, which happened when our peach trees, apples, &c., were in that state of forwardness, when cold and rain, even without a frost, usually produce this effect. Along the lake, where the blossoms were later, the fruit was not destroyed. This was true too on the northern shore of the lake in Canada. By the severe thunder shower of June 1st, the trees dropped, in this vicinity, their destroyed fruit, entirely in many orchards. Cherries were considerably abundant.

Cultivated strawberries and raspberries, a fruit of high luxury, abounded.

Grapes attained their usual proportion, though the crop was not as large as common.

The potatoe has given a good yield, generally free from the rot, especially where grown on light, sandy soil.

The expectation of the Asiatic Cholera, and its appearance in our city on June 20th, led to unusual caution in the use of the fruits of summer. To this, and the great efforts in cleansing the city, with much perseverance, with the scattering of lime in streets and alleys, is to be attributed the perservation, under Providence, of the people from its severe ravages. C. D.

7. *Observations made at one of Colleges, and at several of the Academies in the State, on the variation of the Magnetic Needle.*

Name of Colleges and Academies.	Latitude N.	Longitude W.	Magnetic Variations.	When observed.
Geneva College,	40°52′	75°05′	3°49′00″W.	October 1, 1833,
Academies.				
Albany,	42 39	73 44	6 40 00 W.	October, 1834.
			7 35 11 W.	November, 1847.*
Auburn,	42 55	76 28	3 43 00 W.	October 25, 1833.
Clinton,	41 00	72 19	6 08 00 W.	November 5, 1834.
Canajoharie,	42 53	74 35	6 05 00 W.	October, 1839.
Cherry Valley,	42 48	74 47	5 13 00 W.	August 19, 1839.
Cortland,	42 38	76 11	5 05 00 W.	October 24 '25, 1840.
Erasmus Hall,	40 37	73 58	4 25 00 W.	October, 1834.
			4 45 00 W.	October, 1835.
			4 45 00 W.	October, 1837.
			4 45 00 W.	December 18, 1838.
			4 55 00 W.	January 4, 1840.
			5 00 00 W.	December 22, 1840.
			5 12 00 W.	December 30, 1841.
			5 10 00 W.	December 26, 1842.
			5 05 00 W.	December 25, 1844.
			5 10 00 W.	December 23, 1845.
			5 30 00 W.	December 20, 1847.
			5 15 00 W.	October 26, 1848.

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* The mean of a large number of Observations made with a compass on the Meridian Line, in the Academy Park, at 9 A. M. of each day, for several successive days, in the beginning of November, 1847. P. T. E.

OBSERVATIONS, &c.—(CONTINUED.)

Names of Colleges and Academies.	Latitude N.	Longitude W.	Magnetic Variations.	When observed.
Hempstead,	49° 43′	73° 38′	6° 00 00 W.	
Hamilton,	42 49	75 34	4 30 00 W.	October, 1837.
Johnstown,	44 00	74 23	6 02 00 W.	November 24, 1818.
North Salem,	41 20	74 37	6 00 00 W.	September, 1843.
Ogdensburgh,	44 43	75 34	6 10 00 W.	November, 1838.
Oneida Conference Seminary,	42 57	75 46	3 25 00 W.	October 31, 1834.
			4 00 00 W.	August 17, 1837.
			4 22 00 W.	May 26, 1840.
			4 31 00 W.	June 6, 1841.
			4 36 00 W.	July 20, 1842.
			4 40 00 W.	June 21, 1843.
Oxford,	42 28	75 32	3 51 45 W.	October 9. 1834.

8. LATITUDE, LONGITUDE AND ELEVATION OF THE RESPECTIVE PLACES REPORTING.

1849.

ACADEMIES.	N. Latitude.	W. Longitune.	Elevation of places of observation above tide.	TOPOGRAPHICAL REMARKS.
Albany,	42°39′	73°44′	130ft	On the west side of the valley of the Hudson, and on the edge of a plain extending back to the Mohawk.
Amenia,	41 48	73 36		Elevation 540 feet above medium line in Haerlem river.
Auburn,	42 55	76 28	650	In the valley of the outlet of the Owasco Lake, about 100 feet below the lake, and 250 feet above the Canal at Port Byron.
Cayuga,	42 43	76 37	447	Elevation above Cayuga lake, 60 feet.
Cortland,	42 38	76 11	1,096	In the valley of the Homer river, 98 feet below the Tully lakes.
Dutchess county,	41 41	73 55	....	On the eastern bank of the Hudson.
Erasmus Hall,	40 37	73 58	40	On an inclined plane gradually decending to the ocean, near the western extremity of Long Island.
Fairfield,	43 05	74 55	1,185	About 300 ft. above the valley of West Canada Creek, and 800 ft. above the canal at Herkimer.
Farmers' Hall Academy,	41 20	74 11	....	Elevation above tide water 425 feet, as ascertained by the recent railway survey.
Granville,	43 20	73 17		
Hamilton,	42 49	75 34	1,127	In the valley of a branch of the Chenango, 702 feet above the canal at Utica.
Hartwick,	42 38	75 01	1,100	On a tributary of the Susquehannah, at least 1,100 feet above tide water.
Hudson,	42 15	73 45	150	On the east side of the valley of the Hudson about 150 feet above the river.
Ithaca,	42 27	76 30	417	In a valley at the head of Cayuga lake, about 30 feet above the surface of the water.
Johnstown,	43 00	74 23	....	On the north side of the valley of the Mohawk.
Kingston,	41 55	74 02	188	On an extensive plain 188 feet above the Hudson river, on the west side.
Lansingburgh,	42 47	73 40	30	In the valley of the Hudson, on the east side of the river.
Lewiston,	43 09	79 10	280	On the eastern bank of the Niagara river, near Lake Ontario.

Lowville,	43 47	75 33	800	In the valley of a branch of the Black river, about 100 feet above the level of the river.
*Mexico,	43 27	76 14	331	Elevation above Lake Ontario, 99.7 feet, south from the lake about 4 miles.
Montgomery,	41 32	74 00	....	On the Wallkill, a western branch of the Hudson.
Mount Pleasant.	41 09	73 47	....	On the east side of the valley of the Hudson, 125 feet above its level.
Newburgh,	41 09	74 05	150	On the west side of the valley of the Hudson, probably 150 feet above the surface of the river.
New-York,	42 45	74 02		
North Salem,	41 20	73 38	170	On the north bank of the river Titicus, about 20 miles from Peekskill, and about 170 feet above the level of the sea.
Oneida Conference,	42 55	75 46	1,260	Elevation above the canal at Utica, 824 feet.
Oxford,	42 28	75 32	961	In the valley of the Chenango river.
Plattsburgh.	44 42	73 26		
Rochester Collegiate Inst.,	43 07	77 51	606	On the Genesee river.
Springville,	42 30	78 50	....	Elevation supposed to be about 500 feet above the canal at Buffalo.
St. Lawrence, Potsdam,	44 40	75 01	394	On the Racket river, 169 feet above the St. Lawrence at Ogdensburgh.
Union Hall,	40 41	73 56		
Washington, Salem,	43 15	73 30		

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* Name changed from "Rensselaer Oswego."

POMPEY ACADEMY.—According to some recent Barometrical Obesrvations by Professor Guyot, its elevation above the sea is 1735 feet, and above the canal at Syracuse 1336 feet.

9. PRELIMINARY ARRANGEMENTS FOR ESTABLISHING A NEW SYSTEM OF METEOROLOGICAL OBSERVATIONS AND PROFESSOR GUYOT'S REPORT ON THE SAME.

The Legislature of 1849, in compliance with the request of the Regents of the University, made in several of their Annual Reports, granted a sum of money for the purchase of Meteorological Instruments, and the establishment of various stations for observation with them throughout the State.

As it was understood that the Smithsonian Institution had in view the establishment of a similar system throughout the United States, an interchange of views was immediately had, and a general plan agreed upon. The summer and autumn were consumed in the construction of the various instruments, and which were intended to be the best of their kind.

Professor Guyot long known in Europe as a profound scholar in this branch of science and now resident at Cambridge, (Mass.,) was appointed to visit the stations that had been selected by himself and Professor Henry—after a careful study of the map of the State—as the best adapted for the purpose.

The subsequent proceedings of the Regents will be understood by a perusal of the following papers.

UNIVERSITY OF THE STATE OF NEW-YORK,
Albany, Nov. 19, 1849.

CIRCULAR.

To the Trustees and Principal of
Academy.

GENTLEMEN:

You are all familiar with the System of Meteorological Observations, established by the Regents of the University, under the patronage of the Legislature, in 1825. A number of Academies have continued to make their Annual Reports up to the present time, and the results of these are universally acknowledged both in Europe and this country, to have aided in advancing the science of Meteorology.

With the progress of improvement and the development of new discoveries, this science has of late, scarcely kept pace with the general increase of knowledge, and the Regents have for several years felt (and have so repeatedly represented to the Legislature,) that their present arrangement was scarcely compatible with the increased demands upon it. The phenomena of storms have attracted great and deserved attention. It is a mighty problem whether human ingenuity cannot so far discover or foretell their approach, as somewhat to prevent the fearful loss of life and property with which they are usually accompanied. The regularity or the alternations of the temperature, when accurately ascertained in various parts of our State, may, (as they have been already in a certain degree,) be applied with advantage to the labors of the husbandman in the introduction of new articles of culture and in the improvement of agricultural processes. Again, a proper study of climate as to its heat and cold, dryness and moisture, and all its other incidents, can alone furnish us with safe data, by means of which we can ever hope to eradicate epidemic and endemic diseases, or at least, mitigate their severity.

These are but a few of the considerations which justify and require the full investigation of Meteorological Phenomena by the public authorities. The Colleges and Academies of this State are the proper agents for this purpose, and it is hoped they will enter on it with cheerfulness and ardor.

An appropriation was obtained from the Legislature for the years 1849 and 1850, to establish and organize a new system of Observations. The whole summer has been occupied in making the required instruments, which for the present will consist of a Barometer, Thermometer, Rain and Snow Gage and Wind Gage or Vane.

On a conference with Professor Henry of the Smithsonian Institution, it is ascertained that a plan is forming to carry out a similar system over the whole United States. Many of the Telegraph Companies, extending from Maine to New-Orleans, have promised their aid in communicating the approach of Storms, &c.

The Regents are desirous of commencing a system as early as possible. For this purpose they have engaged the services of Professor GUYOT, late of Neuchatel, in Switzerland, long devoted to the Science and known by his work on Physical Geography, lately published in this country, to visit the Academies that have been selected—to carry with him the instruments for each—to direct and aid in putting them up, and also to give all necessary instructions as to the method of observing and of recording the results.

Should you agree to engage in this matter, you will please to facilitate his labors as rapidly as possible, as the season is advancing and he will need all his time.

Printed directions are preparing at the Smithsonian Institution, relative to every matter to be attended to. These, and the forms necessary, will in due season be transmitted to you.

As to the remuneration, that it will be in the power of the Regents to grant, I am instructed to state that with the means appropriated, it cannot for the present exceed thirty dollars per annum. It is to be hoped, if the plan prospers, and for this we must greatly depend on the observers, that the allowance will be increased. But at present, the appeal is to the public spirit of the State Collegiate and Academic Institutions, to, at least, commence this important work.

By order of the Regents,
T. ROMEYN BECK,
Secretary.

Professor Guyot continued, until the advanced season and bad state of the roads, rendered it impossible to transport delicate instruments without injury. The same reason, owing to our untoward and very wet spring, has prevented him from resuming his remaining duties, but it is hoped that he will be enabled to complete them during June.

In March last, the Regents received the following:

PROFESSOR GUYOT'S REPORT.

CAMBRIDGE, MASS., *March 21st,* 1850.

To the Regents of the University of the State of New-York:

Gentlemen—Having accepted the honorable invitation addressed to me to undertake the establishment of Meteorological Stations in the State of New-York, under the care of the Regents of the University of that State, I beg leave respectfully to submit to your honorable body a preliminary report upon what was done before the winter for that object.

In a conference with Prof. J. Henry, Secretary of the Smithsonian Institution, at New-York city, the best form to be adopted for the rain and snow gages, and for the windvanes was discussed, and the instruments ordered. The barometers and thermometers already finished, were examined, and some improvements recommended. At the same time a preliminary project for the most suitable distribution of the stations over the state was drawn up, which project was afterwards submitted to Dr. T. Romeyn Beck, Secretary of the Board of Regents, examined again, and definitively settled by adding several stations, which seemed to be very desirable for the completion of the whole system.

The instruments furnished to the stations of observation, according to the plan adopted by the Regents, are a Barometer, a Thermometer, a Rain gage, a Snow gage and a Windvane.

The first step to be taken was to go into a careful examination and comparison of the instruments with standard instruments, deserving full confidence, in order to ascertain their differences, to fix the correction to be applied to each of them, and thus to be able to establish an exact correspondence between them, and also between their indications and those of other observatories in this country and abroad.

As soon as the instruments were ready, I went to New-York to attend to this matter. I beg leave to state here, in a few words, the result of this my examination.

The barometers made by James Green, in New-York, are cistern Barometers, with a constant level. The variations of the level of the mercury in the cistern are corrected before every observation, by means of a screw which brings the surface of the mercury to the zero point, or to the bottom of the scale. The barometrical tube is enclosed in a cylindrical brass covering, upon which the scale is engraved. The scale is provided with a vernier, which enables the observer to read directly the height of the mercury to a hundreth of an inch, and to estimate very closely the thousandths. A thermometer is attached to the brass tube, the reservoir of which is also covered with a brass envelope, so that being placed in the same condition as the barometrical tube, it may indicate truly its temperature. Twenty-three barometers, bearing each a peculiar number, were carefully compared, during three different days, by over 150 observations, with a standard Fortin barometer by Ernot, in Paris, and a Standard barometer by Newman, in London, belonging to the Smithsonian Institution. The relation of the Fortin Ernot barometer with the best standard in Europe having been ascertained by a direct comparison with the well known standard of Commandant Delcros, in Paris, the correspondence of the barometers by T. Green with the observation abroad may be considered as established. An additional confirmation of the results has been obtained by the comparisons I made of the Fortin Ernot with the Newman Standard of Cambridge, Mass., observatory, of Prof. B. Pierce's in the same place, of Columbia College in New-York, and of the British observatory in Toronto. The constant total correction to be applied to each of the barometers destined to the stations, including that for capillary action was thus determined, and a record of all the comparisons was kept for reference.

The result of this examination and of these comparisons, proved the barometers by J. Green to be good and trustworthy instruments; and they will be still more so when several improvements I indicated in the mode of construction, shall have been applied to them.

Thirty-six thermometers by the same maker, have been compared at different points of their scale, by over two hundred comparisons with two standards by Bunten, in Paris, and a standard of Troughton & Simms, in London; the last one belonging to the observatory of Cambridge, Mass. Twenty-four of them were chosen, the differences of which were found small enough to be safely neglected in Meteorological observations. A record of the comparisons was, in like manner, kept for reference.

The rainguages made by M. M. Pike & Son, in New-York, consists in an inverted cone, or funnel, having an aperture of one hundred square inches, the funnel terminating in a tube which carries the rainwater into a vessel. The quantity of the water is measured in a cylindrical glass divided into a hundred parts, each part holding a cubic inch of water. By this arrangement, one inch of rain in depth falling into the gauge makes a sheet of one hundred cubic inches of water, which fills the whole glass, and each of the hundred divisions of the same corresponds to one-hundredth of an inch of rain in the gauge. Another smaller glass gives the thousandths of an inch, and may serve as a substitute for the larger one in case of accident.

The snowguage is a simple cylindrical vessel of zinc, 30 inches high, with a cock at the bottom to draw off the water, after the snow is melted. Its opening being one hundred square inches, like that of the raingauge. The melted snow is measured in the same graduated glass as the rainwater.

The windvane is a thin sheet of metal, nearly three feet long, carefully balanced by a ball of lead. It is fixed at the top of a wooden rod which descends along the walls of the building, or through the roof, to the window of the observer. It terminates in a steel pivot, moving upon a piece of cast-iron, which bears a dial indicating the different points of the compass, and divided into degrees. The rod bears an index which marks on the dial the direction of the wind. The observer is thus enabled to read the direction of the wind in the night, and during storms, as well as in the day time, and in clear weather, a very important arrangement for the study of storms.

As to the distribution of the stations over the State, two principal objects were kept in view; the propagation of the great barometrical waves, or the law of storms, and the special climate of the different regions of the State, as regards temperature, humidity, &c. For the first object a distribution of the stations at equal distances would be the most appropriate; but for the second we must take into account all the physical circumstances, such as the configuration of the surface of the country, the elevation above the ocean, the neighborhood of mountains, of large forests, of great sheets of water, or of the sea, the exposure to certain winds, &c. In order to combine, as far as possible, the advantages of both methods, the State has been divided into physical regions, and in each region the stations have been distributed in the manner which seemed to correspond best with those demands. Their number will be such that, except in a few cases, they will never be farther apart than 50 miles.

Nature itself seems to have marked out in the State by the very forms of the soil, by the disposition of the deep valleys, and high mountains, of the large depression, several physical regions which are the following:

1. The Southern or Maritime Region.
2. The Eastern or Region of the Highlands and Catskill mountain, with the valleys of the Hudson and Mohawk.
3. The Northern, or the Region of the Adirondack mountains, isolated by the deep valleys of the Mohawk, Lake Champlain, St. Lawrence and Lake Ontario.
4. The Western or the Region of the western plateau, with the small lakes and the sources of the rivers.
5. The Region of the great lakes Erie and Ontario. Each of those regions will be provided, as far as circumstances permit, with a number of stations, as well on the elevated portions as in the valleys, sufficient for ascertaining the principal features of their respective climate.

The choice of a suitable locality for a meteorological post being settled, the establishment of the station requires the following arrangements:

The first and most important care to be taken is to determine the best place for the instruments; for the errors arising from a wrong situation of them may be, according to the cases, as large, if not larger than those coming from a bad construction, or from a want of skill in the observer; the more so that these errors are constant, and without compensation. The placing of the thermometer and of the windvane especially, presents many difficulties which cannot always be entirely removed.

The barometer must be fixed in its box to the wall in a sheltered place, and in good light.

The thermometer needs to be sheltered against the sun, the rain and the radiation, by a screen of lattices and a little roof.

The windvane must be fastened strongly upon the roof of the building, the rod placed exactly vertical, so as to move freely, the index parallel with the plan of the vane; the dial correctly fixed according to the points of the compass.

The rainguage must be arranged in an open yard, and put in a barrel buried in the ground, so that its opening may not be far from the surface.

After these arrangements the observer must be taught, if necessary, how to manage the instruments, and observe them with caution and accuracy, particularly the barometer. He must get accustomed, by repeated trials, to bring the level of the mercury in the cistern to the zero point, to fix accurately the vernier, and to read the height of the barometrical column to the thousandth of an inch. The observer must be furnished with a model of the journal, and receive instructions upon the mode of recording the observations, of reducing and correcting them, of taking the daily and monthly means, &c., so as to prepare them for publication.

An important fact more, to be ascertained, is the exact elevation of the place of observation above the ocean.

These various matters have been attended to at all the stations which were visited in the months of November and December of the last year. The elevations were determined barometrically, with reference to the level of the Erie canal at different points.

The season being too much advanced to establish the stations all over the State, it has been thought best to begin with the posts situated along, and in the vicinity of the line from New-York, through the Hudson and Mohawk valleys to Buffalo; crossing the state from east to west, in the direction the most interesting for the march of storms.

The stations which have been furnished with the above instruments are the following:

I. Maritime Region, New-York city.

1. Rutgers Institute.
2. Deaf and Dumb Institute.
3. Flatbush, Erasmus Hall.
4. North Salem.

II. Eastern Region, Valley of the Hudson.

5. Newburgh.
6. Hudson.
7. Albany.

III. Valley of the Mohawk and Vicinity.

8. Canajoharie.
9. Cherry Valley.
10. Utica.

IV. Western Region.

11. Pompey Hill.
12. Ithaca.
13. Seneca Falls.
14. Geneva College.
15. Rochester.
16. Buffalo.
17. Lewiston.

All the windvanes, rain and snowguages, which were ready having been employed, the posts of Newburgh, Hudson, North Salem, Erasmus Hall, and the two in New-York city, did not receive those three instruments at that time, but if they are not provided with, at the present moment, as they should be, according to the order given to the maker, they will be so in a very short time.

Printed blankforms, with extensive instructions, tables of reduction, etc., will be issued in a short delay, by the Smithsonian Institution, and will be sent to the observers.

I cannot help expressing my regret that the hygrometer is wanting in the set of instruments furnished to the meteorological posts. The humidity of the atmosphere is such important an element in the climate that its investigation should be considered as necessary as that of temperature and atmospheric pressure, the more so that the knowledge of it renders the barometrical observations much more valuable. The cost of a wetbulb instrument, which I should wish to recommend, would be comparatively very small, and its establishment, in these circumstances, would add nothing to the charges.

Before closing, I beg leave to mention here a beautiful compliment to the meteorological system of the State of New-York. In compliance with the directions received from Prof. J. Henry, Secretary of the Smithsonian Institution, who secured the co-operation of the presidents of the telegraph lines, I placed a barometer and a windvane in the telegraph offices of New-York, Albany, Syracuse and Buffalo. The state of the barometer, the direction of the wind and the weather at each of these stations, will be thus recorded every day at Washington, and a storm coming from the west will be announced at any place along the line before it reaches it, and in the maritime cities long before it arrives at the coast. A 5th station will be established on that line, at Utica, the next season. This is only, it is hoped, the beginning of an extensive system, from which science, as well as the whole community, may expect the happiest results.

The organization of the remaining stations will begin again as soon as the season shall be favorable for travelling in the northern part of the State.

When the whole system shall be in full operation, I shall consider it my duty to submit to the Board of Regents all the details which the scientific world has a right to expect, and which will secure to the observations made under the care of your honorable body, the scientific rank to which they will be entitled.

I remain, with high regard, and
very respectfully your obedient servant,
A. GUYOT, *Professor.*

P. S. A communication dated May 27, has been received from Professor Guyot at Washington, stating that the delay in publishing the Instructions for Meteorological observations, occasioned by the ordinary causes among artists, is nearly overcome, and that they will very shortly be issued. Prof. Guyot will immediately on their publication visit the remaining stations that have been selected.

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I. PRELIMINARY REPORT

On the Observations of the Aurora Borealis, made by the non-commissioned Officers of the Royal Artillery, at the various guard rooms in Canada.

(By Captain Lefroy, R. A., F. R. S.)

(*From a copy received from the author.*)

The system of Observations on the Aurora Borealis, permitted by Colonel Dynely, C. B., at my request, to be made at all our regimental guard rooms, under the sanction of the officers in command, has now been continued for two years in Canada, and for one year in Nova Scotia and Newfoundland. I have, therefore, pleasure in communicating to the officers and non-commissioned officers who have interested themselves in the subject, a short account of what has been done, for the sake of the encouragement which the results afford for persevering in the undertaking.

The printed instructions dated 11th October, 1848, expressed in a few words the objects in view in keeping these registers. They were: (1.) To ensure the observation of every Aurora which should be visible in Canada, so as to afford a better criterion of the actual frequency of the phenomenon than can be given by observations at any one station. (2.) To supply the means of judging how far variations of the Magnetical Elements, shown by the instruments at Toronto, during cloudy weather, might be connected with Aurora visible elsewhere. (3) To furnish data for computing the height or distance of the luminous region from the earth. (4.) Lastly, to throw some light on the question whether or no the same Aurora is not sometimes seen under considerably different forms by observers stationed not very far asunder.

It is not worth while to enter into some of these enquiries until all the materials for comparison are accessible, including the Observations made in the United States under the instructions of the Smithsonian Institution, and those published in the Regents' Reports. I shall confine myself, therefore, at present, principally to the first of them.

In the year 1848, Aurora, or Auroral Light, was observed at Toronto on 69 nights, although for the last six months of the year no observation was made after midnight. This number is exclusive of 5 observations of a luminous appearance in the clouds, referred to Aurora, but not perfectly determined. Observations are to be found at other of our stations on many of the same, and on 57 other nights, exclusive of one doubtful one: making a total of 126 decided, and 6 doubtful appearances in Canada.* There are about 46 nights in the year on which it was clouded at all the stations; if we omit these, the proportion is 10 observations to every 26 nights on which observation is not wholly precluded by the state of the sky—or 39 per cent.

This proportion is greater than that given by any one station taken singly. We have—

At Quebec in 1848,	52 observations to	188 practicable nights,	28 per c'nt
Montreal,	41 ------	201 --------	20 ----
Kingston,	64 ------	218 --------	29 ----
Toronto,	69 ------	207 --------	33 ----
London, C. W.,	33 ------	178 --------	19 ----

It is, however, probably less than the truth, as far as it expresses the actual frequency of the phenomenon, as I have considered observation to have been possible whenever nothing to the contrary is stated, which is, most likely, more than the facts would warrant; moreover, when we consider the short duration of some of the displays, and how close to the horizon others of them occur, it is difficult to believe that we have noted every one, even on nights when the sky was clear; it is probably set down as clear in many instances when it was sufficiently clouded near the northern horizon to prevent a feeble display from appearing. The dates included in the list at which it was seen at all the stations, which extend along a line of 500 miles, are Jan. 11, 16; Feb. 21, 23, 24; March 16, 24; April 1, 2, 5, 6, 7, 29; Aug. 21; Nov. 16. On several other occasions it was seen at every station at which the state of the sky permitted it; but there are one or two instances of clear sky at stations not recording Aurora which was seen elsewhere.

Aurora, or Auroral Light, was observed at Toronto in 1849, on 63 nights, exclusive of 5 entries of an uncertain character—the observations terminating at midnight throughout the year. The other stations, including Newfoundland and Halifax, add 70 more, exclusive of 2 doubtful ones: making a total of 133 certain, and 6 uncertain appearances, in Canada, Nova Scotia, and Newfoundland.†

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* Including Newfoundland for November, and part of December.

† One of the uncertain appearances at Toronto is confirmed by other observations.

The area included this year, measured from London, C. W., to Newfoundland, extends about 1150 miles from east to west; and measured from Quebec to Halifax, about 140 miles from north to south. Owing to this great extent, there are but few nights (24) clouded at all the stations, and omitting these, the proportion is 39 per cent, or exactly the same as before. We have at—

Newfoundland, in 13 months, or from 26th Nov. 1848, to 31st Dec. 1849,
59 observ. to 178 practicable nights, or 33 per cent.
Halifax, in 10 months, or from 14th Jan. to 31st Oct. 1849,
30 observ. to 136 practicable nights, or 22 per cent.
Quebec, in 12 months of 1849,
44 observ. to 182 practicable nights, or 24 per cent.
Montreal, 26 ---- (Descriptions imperfect.)
Kingston, 34 ---- 178 ------ 19 ----
Toronto, 63 ---- 199 ------ 31 ----
London, 26 ---- 172 ------ 15 ----

In this list there are but two Auroras seen at all the stations without exception: they occurred on Feb 27, and July 23. There are eleven dates at which it was seen at Newfoundland and London or Toronto, but missed at some of the intermediate stations. These dates are—Jan. 14, Feb. 19, March 17, April 24, July 31, Aug. 12, Sept. 12 and 18, Oct. 7 and 30, Nov. 28. None of the stations, singly, give quite so many appearances as the previous year; the five Canadian stations, which gave 121 appearances in 1848, give but 99 in 1849, the remainder being made up from the other commands.

These observations, having been continued throughout the night, may be referred to for testing an apparent law, which was noticed in the observations made by Serjeant Henry and myself at Lake Athabasca, in the winter of 1843-4, and which is fully confirmed by the series at Toronto, namely, that the Aurora Borealis does not appear with equal frequency at all the hours of darkness, but is subject, like most other phenomena in Meteorology, to influences having a diurnal period as well as an annual one The present series places the hour of maximum frequency at 10 or 11 P. M.; probably a longer continuance will be necessary to fix it accurately.

TABLE

Showing the number of the times on which Aurora is reported at each hour of the night.

STATION.	1	6	7	8	9	10	11	Mid.	1	2	3	4	5	6
1848.														
Quebec, ...	2	5	16	23	25	31	32	23	20	16	17	12	7	1
Montreal, ...	....	1	3	11	18	22	23	21	18	17	15	7	2	....
Kingston, ...	....	4	5	17	26	30	32	32	24	22	12	9	2	....
London, ...	....	1	6	12	18	17	14	11	9	6	7	5	3	....
	2	11	30	69	87	100	111	87	71	61	51	34	14	1
1849.														
Newfoundland, ...	1	8	15	19	21	32	34	27	20	18	11	6	6	1
Quebec, ...	....	2	5	12	11	20	15	12	9	5	4	2	3	....
Montreal, ...	....	3	3	5	4	8	11	11	11	9	6	4	....	....
Kingston, ...	....	1	6	10	11	14	9	8	6	5	6	3	1	....
London, ...	....	....	1	9	15	17	14	9	11	4	3	....	....	....
	1	14	30	55	62	91	83	67	57	41	30	15	10	1
Two years, ...	3	25	60	124	149	191	194	154	128	102	81	49	24	2

Any observations before 6 P. M. is here set down at 5 and so on.

The Aurora appears in Canada in every month of the year. The greatest number of observations is in April, and there is a very marked excess in February, March and April of each year over any other period. Taking them by the seasons, there are—

In the Spring, March, April, May,	1848	40	1849	41
Summer, June, July, Aug.,	"	21	"	29
Autumn, Sept., Oct., Nov.,	"	31	"	34
Winter, Dec., Jan., Feb.,	1848-9	37	1849-50	(about) 20.

I believe that this number of observations is greater than has ever before been made in so low a latitude, and I am inclined to think that it is very high even for Canada. The greatest number of Observations at Toronto in any previous year since 1840, was 37, in 1846; the average of the ten years being 35. The greatest number in any one year (from 1837 to 1848) collected in the Regents' Reports, is 75, the average 50. The greatest number observed by M. Hansteen at Christiana, in Norway, Lat. 60° from 1837 to 1846, in any one year, is 52—the average 33. This result is not more than may have been expected from the great advantages afforded by the duties of the N. C. Officers on guard, for observations of the kind, and from our comparative proximity in geographical position to the magnetic pole, with which, in some way, not at present well understood, the phenomenon appears to be connected. But it is highly satisfactory to find that the pains taken have been so successful. For the next twelve months, observations will be continued at Toronto, throughout the night, and the Observatory will be provided with a number of self-registering instruments, recording every change of the magnetic elements mechanically. Hence it will be of great consequence not to lose the key which Auroral displays at a distance may possibly afford to those movements in a single instance.

At some of the stations the N. C. Officers have got out of the habit of attempting to describe what they see. This is to be regretted. Measurements with the wooden quadrant, or careful estimations of the heights and azimuths of arches, are frequently wanting, and the time is not always stated. This remark applies particularly to the termination of the displays, which are frequently said, in general terms, to have lasted until daybreak; in all such cases, the observer should state, as nearly as he can, the latest moment at which he was sure of seeing the light—watch its extinction attentively, and endeavor to decide for himself whether that is the consequence of the increase of daylight, or of the actual termination of the phenomenon. Very early appearances should, for similar reasons, be particularly described; for instance, it is recorded to have been seen at London, C. W., on the 24th July, 1848, at ½ p. 7 P. M., which is but a few minutes after sunset. Such a rare observation should have every possible confirmation. These particulars might at least be noted with very little trouble at the hours of going rounds. I should be glad also to see a more explicit statement every morning of what the character of the night has been, as regards the possibility of observing Aurora, so as to give some precision to the rough calculation attempted above of the per centage of nights in which it is seen, to nights in which it could be seen if it occurred. The expression of "fine night" is ambiguous. In any statement of this kind, the point to be chiefly referred to is the condition of the northern half of the sky—the rest is of little consequence. I should be obliged by a memorandum on the next Register of the nature of the look-out at each station, and how nearly down to the horizon the view from NE to NW. extends; some difference in this respect is perhaps the reason why the observations are more numerous at some stations than at others.

Dates of all the Observations included in the foregoing comparison. The stations are expressed by their initials:—N., Newfoundland; Q., Quebec; M., Montreal; H., Halifax; K., Kingston; T., Toronto; L., London, C. W.; P., Penetanguishene; F., Fenelon Falls; B., Bruce Mines, Lake Huron. The last three are additional stations, from which I have been favored with communications.

1848.—JANUARY.

3—K. T.
9—L.
11—K. T. L.
15—K. L.
16—K. T. L.
23—K.
28—M. T. L.
29—K.

FEBRUARY.

6—Q. M. K.
7—Q. M. K. T.
8—Q. M. K. T.
12—M.
13—M.
14—M. T.
20—L.
21—Q. M. K. T. L.
22—T
23—Q. M. K. T. L.
24—Q. M. K. T. L.
25.—Q. M.
28—Q.
29—K.

MARCH.

1—M. T.
6—M. K. T.
8—T. L.
10—K.
14—Q. M. T.
16—Q. M. K. T.
19—K. T.
20—Q.
23—Q.
24—Q. M. K. T.
27—T.
30—M. K.
31—T.?

APRIL.

1—Q. M. K. T. L.
2—Q. M. K. T. L.
3—Q.
4—K. T.
5—Q. M. K. T. L.
6—Q. M. K. T. L.
7—Q. M. K. T. L.
9—M. K.
15—M. K. T.
16—K.
17—Q.
20—Q.
21—K. H. T.
23—T. L.
24—T.
26—Q.?
29—Q. M. K. T. L.
30—Q. M. K. T.

MAY.

2—T.
4—Q.
7—M. K. T.
8—Q. T.
17—Q. T.
18—Q. K.
22—K.
24—K. T. L.
25—K. T.
26—T.
31—K. T. L.

JUNE.

3—M. K
5—K.
9—M.
22—T.
28—L.
29—Q. K. T.

JULY.

3—K. T. L.
4—K. T.
5—K.
10—Q. M.
11—K. T.
24—L.
27—L.
28—K.
29—K.

AUGUST.

1—M. K.
3—M.
8—Q. M. K. T.
21—Q. M. K. T. L.
22—Q. M. L.
28—T.

SEPTEMBER.

3—Q. K
4—Q. M. K. T,
17—K.
18—Q. K.
20—T.
29—T.
30—T.

OCTOBER.

2—Q.
4—Q.
8—Q. M. K. T.
17—T.?
18—T.
19—L.
22—K. T. L.
23—M. K. T.
24—T.
25—Q. T.
27—Q.
28—Q.
29—K.
30—Q.
31—K. T.

NOVEMBER.

10—T.?
15—T.?
16—T.
17—Q. M. K. T. L. P.
18—Q. T.
19—Q. T.
21—T. L.
22—Q. T.
23—Q. K. T. P.
25—T.?
26—N. Q. K. T. L.
27—N. T.
30—M.

DECEMBER.

2—N.
8—K.
13—N.
14—N.
17—Q. K. T. L.
18—N. K. T. L.
19—Q. L.
21—N.
22—K.
23—N. P.
25—N.
26—N. Q M. K.

1849.—JANUARY.

7—N. Q,
11—Q.
14—N. Q. K. T. H.
17—P.
22—T.
23—N.
25—N.
26—T.

FEBRUARY.

3—Q.
9—Q.
12—Q. M.
13—Q. H. T.
14—T.
15—N. Q. M. P.
16—N. Q. T. L.
17—P.
18—Q. K. T. L. P.
19—N. Q. H. T.
20—N. Q. H.
21—Q. H.
22—N.
23—N.
25—Q.
26—N. K. T. P.
27—N. Q. M. K. T. L. H. P.

MARCH.

6—Q.
9—L.
15—K.
17—N. Q. K. T. L. H. B.
18—Q. M. K. T. L. B.
21—T.
25—T. H.
26—T. L.
27—T.
30—N. K. T. L.
31—T.

APRIL.

1—T. H.
2—Q. M. L.
4—H.
11—K.
13—M. T. H.
14—Q.
15—N.
16—T. L. H.
17—N. Q. M. H.
18—N. Q. M.
20—N. T. H.
21—Q. H.
22—N. T.
24—N. M. K. L.
25—N.
26—N.
27—N. Q.
28—L.
29—Q. H.?
30—N.

MAY.

1—Q. H.
6—H.
11—N. H.
14—T. L.
17—T. H.
20—T.
21—T.
23—T.?
25—K. T,
26—K.
27—M.

JUNE.

6—Q.
8—K.
14—Q.
16—Q.?
17—M.
18—M.
20—N. Q. T. L.
22—T.
24—K. L.
25—H.?
27—Q.

JULY.

3—H.
4—H.
5—T.
9—N. T.
10—T.
12—L.
20—T.
21—N.
22—Q. T.
23—N. Q. M. K. T. H. L.
26—T.
31—N. Q. M. K. T. L.

AUGUST.

2—T.
4—N. K.
12—N. T. F. L.
13—N. M. K.
18—T. L.
20—N.
21—K. T.
22—Q. H.

SEPTEMBER.

3—Q.
7—N. T.
8—K. T. L.
9—M.
12—N. K. T. H.
16—N. M.
17—T. F.
18—N. Q. M. K. T. H. F.
19—Q. M. H. F.
21—H.
24—K. T.
29—N. Q. M. K.

OCTOBER.

7—N. Q. M. K. T. L.
9—M.
10—T.
13—Q. K. T. L.
14—Q. M. T. H. L.
17—N. K.
18—K. T. H. L.
19—K. H.
20—K.
21—N.
24—M. T.
30—N. Q. T.? L.

NOVEMBER.

10—N.
12—T. K.
13—T.
14—K. T.
15—F.
18—K. T.
19—T.?
21—T.?
25—T.?
26—Q. T.
27—K.
28—N. Q. M. T.
29—N.

DECEMBER.

11—M. T.
12—N. T.
18—T.
20—N.

I will only add that these Observations promise to furnish a valuable body of information respecting the Aurora; and will have a very important bearing on the Observations to which the establishment at Toronto is devoted. While, therefore, I take this occasion of conveying my thanks to my brother Officers, and to the N. C. officers of the Regiment, for their assistance, I beg to renew my request that the system be persevered in.

J. H. LEFROY.

MAGNETICAL OBSERVATORY,
Toronto, 27th March, 1850.

INSTRUCTIONS OF OBSERVATIONS OF THE AURORA.*

N. C. Officers on Guard have an opportunity of observing at every second hour whether any Aurora is visible, and by encouraging the more intelligent of the men, when their posts are favorably situated for the purpose, to notice and report any display of short duration which may occur in the intervals, will be able to state every morning whether Aurora has been seen at all during the night, and if not, whether the state of the sky was favorable or otherwise to observation. Private observers should make a regular practice of looking for Auroras, every clear evening, from dusk to as late an hour as may be convenient, recording the result whether there has been an Aurora or not, together with the times of observation. The notes may be short, but they should be clear and precise. Wet or cloudy evenings should be noted.

Auroral Phenomena may be divided into the following classes:—

(1.) A faint light in the north without definite form or boundary.

(2.) "A diffused light, defined by an arch below."

(3.) Arches resembling the rainbow in size and form, but of a uniform white color, sometimes retaining their apparent position for a considerable time without change.

(4.) "A dark segment under the arch," if any star can be distinguished within this space, the circumstance should be particularly noted.

(5.) "Floating patches of luminous haze or cloud."

(6.) Beams, rays, streamers, transverse and serpentine bands, sometimes tinged with color, and undergoing more or less rapid changes. It may be necessary to define the last two expressions— Transverse bands are frequently nothing more than arches which have advanced nearly to the zenith, or perhaps, have passed it, and retain their regularity of form, although now projected nearly as straight lines. Serpentine bands rather resemble curtains of light, and undergo in their outline changes like those of the folds of a curtain, they are usually the most brilliant part of a display.

(7.) "Auroral Corona, or a union of beams a few degrees to the south of the zenith."

(8.) "A sudden appearance of dark clouds" in the region recently occupied by the Aurora.

(9.) "Sudden appearance of haze over the whole face of the sky."

(10.) Lastly, a disposition in light clouds at a great elevation, to arrange themselves during daylight, in parallel lines, crossing the meridian at right angles, has been frequently suspected to be connected with the Aurora, or with a common source.

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* The original instructions are here extended and improved by the incorporation of some particulars from those issued by the Smithsonian Institute.

The observer should state in plain and definite language the general character of the Aurora, with reference more particularly to the foregoing characteristics. At Canadian Stations every observation of the azimuths of the extremities of an arch, when they are well defined, its span along the horizon, its height above it, or its place among the stars, will be valuable for comparison. At all stations the time at which the light passes to the south of the zenith should if possible be stated, as well as the precise times of very brilliant or active displays, which frequently last but a few minutes. Lastly, it should be noted how much beyond the zenith, to the south, the bands of light descend. The degree of brilliancy may be denoted by the term—Faint, Moderate, Bright, Very Bright.

II. TABLES CALCULATED FROM METEOROLOGICAL OBSERVATIONS MADE DURING 27 YEARS AT NEWBURY, (VERMONT,) BY MR. JOHNSON, OF THAT TOWN.

(The observations above alluded to, were tendered to the Regents for examination. They are of interest, from the length of time during which they have been continued, and also from the position of the place, being a frontier town of the United States, and probably the most northern, at which continuous tables have been preserved. The Regents accordingly caused the reduction of the observations. The following description of Newbury is furnished by the son of the observer.)

Newbury is the north-east town of Orange county, Vermont. It is situated on the Connecticut river, 200 miles north of Hartford, Connecticut. The Oxbow, where Mr. Johnson resides, is a meadow of about 500 acres, around which the Connecticut flows, and is named from its peculiar shape. Newbury is wholly an agricultural town. Its length upon the river is eight miles, and its breadth six miles. The interval lands on its banks, between the towns of Newbury and Havrehill, are broad and fertile, like those further south at Deerfield and Northampton, Mass. The Indians called this interval "Coossuck," or the beautiful meadows. To the north-east of the Oxbow, about 25 miles distant, rise the Franconia mountains, and to the south-east about 15 miles distant, towers Moosehillock, 3000 feet high, upon whose summit snow falls every month in the year. The eastern slope of the Green mountains is in Topsham, the town west of Newbury, and spurs and ridges of the great chain, come down to the banks of the Connecticut. Half a mile out of the Oxbow is a range of high hills from whose summits can be seen the granite peaks of the White mountains at the east, and at the west the rounded and wooded tops of the Green Mountains.

1823

MONTHS.	WEATHER.		WINDS.									Rain.	Snow.	Rain and Snow.
	No. of fair days.	No. of cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	Winds not returned.			
January,	......	......	......	......	......	......	......	......	......	......	......	......	......	......
February,	......	......	......	......	......	......	......	......	......	......	......	......	......	......
March,	11½	13½	15	......	......	......	8	......	......	1	7	1	6	......
April,	15	15	16	......	......	......	14	......	......	......	......	6	2	1
May,	11½	18½	9	......	1	......	10	......	......	......	10	11	2	......
June,	14	16	5	......	......	......	7	......	......	2	16	6	......	......
July,	17½	13½	10	......	......	......	9	......	1	1	10	8	......	......
August,	17	14	11	......	......	......	4	2	1	......	13	11	......	......
September,	18½	11½	14	......	......	......	16	......	......	......	......	7	......	......
October,	13½	17½	3	......	......	......	3	......	......	......	25	6	1	......
November,	18	12	23½	......	......	......	6½	......	......	......	......	5	3	......
December,	8½	22½	5	......	......	......	5	......	......	......	21	4	8	1
	145	154	111½	......	1	......	82½	2	2	4	102	65	22	2

1824.

MONTHS.	WEATHER.		WINDS.									Rain.	Snow.	Rain and snow.
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	Winds not returned.			
January,	15½	15½	11	......	......	......	3	......	......	......	16	3	8	......
February,	14½	14½	15	2	......	......	6	2	1	1	2	3	4	1
March,	17	14	18½	......	......	......	12½	......	......	......	......	2	8	......
April,	10	20	5	......	......	......	24	......	......	1	......	8	......	......
May,	17	14	24½	......	......	......	6½	......	......	......	......	8	1	......
June,	18½	11½	14	......	......	......	7	......	......	......	9	13	......	......
July,	21	10	2	......	......	......	3	......	......	......	26	8	......	......
August,	16½	14½	11	......	......	......	17	......	3	......	......	7	......	......
September,	16	14	17	......	......	......	6	......	1	1	5	8	......	......
October,	13	17	7	......	......	......	6	......	......	3	11	8	1	......
November,	8	22	14	......	......	......	13	......	......	1	2	8	7	3
December,	10	21	13½	......	......	......	15½	1	......	1	......	3	6	3
	177	188	152½	2	......	......	119½	3	5	8	71	79	35	7

1825.

MONTHS.	WEATHER.		WIND.											
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	Winds not returned.	Rain.	Snow.	Rain and Snow.
January,	13	18	15	......	......	......	16	......	......	......	......	1	7	......
February,	10	18	13½	1	2	......	7½	......	......	2	2	1	6	2
March,	15½	14½	23	......	......	......	8	......	......	......	......	4	7	1
April,	20	10	18	......	......	......	11	1	......	......	......	3	1	......
May,	22½	8½	19	......	2	......	10	......	......	......	......	6	1	1
June,	15	15	11	1	......	......	18	......	......	......	......	11	......	......
July,	20	11	7½	......	......	......	23	......	½	......	......	13	......	......
August,	17	14	16	......	......	......	14½	½	......	......	......	9	......	......
September,	12½	17½	18	......	......	......	11	......	1	......	......	9	......	......
October,	15	16	20	......	......	1	7	2	1	......	......	4	......	......
November,	17½	12½	19	......	......	......	11	......	......	......	......	3	3	1
December,	12½	18½	8	......	......	......	23	......	.....	......	......	6	2	......
	190½	174½	188	2	4	1	160	3½	2½	.	2	70	27	4

1826.

MONTHS.	WEATHER.		WINDS.											
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	Winds not returned.	Rain.	Snow.	Rain and snow.
January,	11	20	14½	......	......	......	14½	1	1	......	......	6	12	1
February,	11½	16½	14	......	......	......	13	......	1	......	......	4	9	1
March,	9	22	17	......	......	......	14	......	......	......	......	8	7	2
April,	13	17	14½	......	......	......	15½	......	......	......	......	5	2	......
May,	24	7	17½	......	3	......	10	......	½	......	......	4	......	......
June,	13½	16½	6	......	......	......	24	......	......	......	......	13	......	......
July,	18	13	15	1	......	......	13½	......	½	2	......	9	......	......
August,	15	16	13	......	......	......	18	......	......	......	......	7	......	......
September,	13½	16½	13	......	......	......	16	1	......	......	......	10	......	......
October,	17½	13½	19½	......	......	......	10	......	½	1	......	11	......	......
November,	8	22	15	......	......	......	13	......	1½	½	......	6	3	......
December,	12	19	18	......	......	......	13	......	......	......	......	5	7	......
	166	199	177	1	3	......	174½	2	5	3½	......	77	40	4

1827.

MONTHS.	WEATHER.		WINDS.									Rain.	Snow.	Rain and Snow.
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	Winds not returned.			
January,	12	19	25	......	......	......	6	......	......	......	......	1	13	......
February,	11½	16½	16	......	......	......	12	......	......	......	......	2	7	1
March,	13	18	21½	......	......	......	10½	......	......	......	......	4	5	......
April,	13½	16½	11½	......	......	......	19½	......	......	......	......	9	2	......
May,	16	15	18	......	......	2	10	......	1	......	......	9	1	1
June,	18	12	10	......	......	1	16½	......	1	1½	......	13	......	......
July,	16½	14½	15½	......	......	......	12½	1	2	......	......	12	......	......
August,	18½	12½	15	......	......	......	13	2	1	......	......	12	......	......
September,	14½	15½	18	......	2	......	8	......	2	......	......	8	......	......
October,	14½	16½	16½	......	2	......	11	1	......	½	......	11	......	......
November,	9½	20½	24	......	......	......	7	......	......	......	......	2	8	1
December,	9½	21½	22½	......	......	......	8½	......	......	......	......	3	7	1
	167	198	213½	......	4	3	134½	4	7	2	......	86	43	4

1828.

MONTHS.	WEATHER.		WINDS.											
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned.	Rain.	Snow.	Rain and Snow.
January,	8	23	16	......	......	......	14	1	......	......	......	5	7	1
February,	13	16	12	......	......	......	17	......	......	......	......	3	7	......
March,	16	15	16	......	......	......	15	......	......	......	......	2	7	......
April,	18	13	21	......	......	......	10	......	......	......	......	8	3	2
May,	11½	19½	13½	½	......	......	15	......	2	......	......	9	......	......
June,	16	14	22½	......	......	......	7½	......	......	......	......	13	......	......
July,	6	25	10½	......	......	......	18½	......	2	......	......	19	......	......
August,	22½	8½	13½	......	......	......	16½	......	1	......	......	9	......	......
September,	15½	14½	17	......	......	......	13	......	......	......	......	9	......	......
October,	17	14	20	......	......	......	11	......	......	......	......	7	......	......
November,	9	21	13	......	......	......	16	......	1	......	......	12	6	4
December,	13	18	12	½	......	......	17	......	1½	......	......	4	4	......
	165½	201½	187	1	......	......	170½	1	7½	......	......	100	34	7

1829.

MONTHS.	WEATHER		WINDS											
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned.	Rain.	Snow.	Rain and snow.
January,	12½	18½	19	½	......	......	11½	......	......	......	......	2	7	1
February,	15½	12½	16½	......	......	......	10	......	......	1½	......	......	8	......
March.	15½	15½	22½	1	1	......	5½	......	1	......	......	4	4	2
April,	11	19	17	......	......	......	12	......	1	......	......	8	1	......
May,	16½	14½	13	......	2½	......	......	1	½	......	......	8	......	......
June,	14	16	13½	......	6	2	7½	1	......	......	......	12	......	......
July,	13½	17½	11	......	......	......	19	......	1	......	......	10	......	......
August,	20½	10½	14	1	......	1	13	1	......	1	......	5	......	......
September,	11	19	17½	......	......	......	10½	1	1	......	......	10	......	......
October,	18	13	15	......	1½	1	13½	......	......	......	......	5	1	......
November,	13	17	14½	......	......	......	13½	1	1	......	......	8	2	......
December,	14	17	15½	......	......	......	12½	2	......	1	......	5	5	......
	175	190	189	2½	11	4	128½	7	5½	3½	......	77	28	3

1830.

MONTHS.	WEATHER.		WINDS.									Rain.	Snow.	Rain and Snow.
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned.			
January,	11	20	17	......	......	......	14	......	......	......	......	3	6	1
February,	15½	12½	20½	......	......	......	7	......	1	......	......	3	4	......
March,	15½	15½	19	......	......	......	11	......	1	......	......	8	4	1
April,	16½	13½	16½	......	......	......	13	......	......	......	......	4	1	1
May,	14	17	14	......	......	3½	10	2	1	½	......	9	......	......
June,	10½	19½	5½	......	......	1	23½	......	......	......	......	11	......	......
July,	14	17	11	......	......	......	21	......	......	......	......	13	......	......
August,	14	17	19½	......	......	......	10½	1	......	......	......	9	......	......
September,	15½	14½	17	......	......	......	13	......	......	......	......	10	......	......
October,	15	16	11	1	2½	......	17½	½	1	......	......	10	......	......
November,	10	20	12½	3	......	......	11	......	1	......	......	10	2	1
December,	7½	23½	15½	......	......	......	......	2	1	......	......	5	7	1
	159	206	179	4	2½	4½	151½	5½	6	½	......	95	24	5

1831.

MONTHS.	WEATHER.		WINDS.											
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned	Rain.	Snow.	Rain and Snow.
January,	18	13	22	......	......	......	9	......	......	......	......	2	7	......
February,	14½	13½	18	1	......	......	4½	½	2	2	......	4	7	3
March,	9	22	10	......	......	......	19	......	1	1	......	6	6	2
April,	10	20	16	......	......	......	13	......	1	......	......	12	1	1
May,	12	19	15½	......	1	......	10	3	2½	......	......	9	1	......
June,	17½	12½	11½	......	......	......	16½	......	1	1	......	9	......	......
July,	10	21	8	......	......	......	19½	2½	1	......	......	13	......	......
August,	16	15	20½	......	......	2	8½	......	......	......	......	6	......	......
September,	11½	18½	18	......	......	......	11	½	½	......	......	10	......	......
October,	18	13	13	......	1	1	11½	3	......	1½	......	8	......	......
November,	2½	27½	16½	......	......	......	22½	......	1	......	......	6	4	1
December,	17	14	23½	......	......	1	6½	......	......	......	......	......	10	......
	156	209	192	1	2	4	151½	9½	10	5½	......	75	36	7

1832.

MONTHS.	WEATHER.		WINDS.											
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned	Rain.	Snow.	Rain and snow.
January,	14	17	22½	......	......	......	8	......	½	......	......	3	9	1
February,	11	18	23	2	......	......	4	......	......	......	......	3	10	......
March,	16½	14½	13½	......	......	......	16½	1	......	......	......	6	6	4
April,	12	18	14	......	......	......	15	½	½	......	......	5	6	2
May,	13½	17½	12	½	1½	2	14	......	......	2	......	13	......	......
June,	12	18	20	......	......	......	9	......	......	1	......	12	......	......
July,	13½	17½	14	......	......	½	16½	......	......	......	......	1½	......	......
August,	11	20	9½	......	......	......	18	3	1½	......	......	9	......	......
September,	19	11	12	......	......	......	15	......	1	2	......	7	......	......
October,	15½	15½	16	......	......	½	12	2	......	½	......	7	......	......
November,	14½	15½	13	......	1	......	12	......	2	2	......	7	3	......
December,	14½	16½	23	......	......	......	6½	1	½	......	......	3	7	1
	167	199	182½	2½	2½	3	146½	7½	6	7½	......	86	41	8

1833.

MONTHS.	WEATHER.		WINDS.									Rain.	Snow.	Rain and Snow.
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned.			
January,	18	13	14	......	......	......	12	2	2	1	......	2	7	......
February,	18	10	17½	......	......	......	10	½	......	......	......	1	10	......
March,	18	13	18½	......	......	......	11½	......	1	......	......	4	5	......
April.	16	14	16½	......	......	1	12	......	½	......	......	8	1	......
May,	13½	17½	9	1½	½	2	16	......	2	......	......	13	......	......
June,	11	19	12½	1	......	1	......	......	2	1	......	11	......	......
July,	14½	16½	11	......	......	......	17½	......	2½	......	......	14	......	......
August,	11	20	11½	......	......	......	14½	......	3½	1½	......	14	......	......
September,	17½	19½	18	......	......	......	9	......	2	1	......	7	......	......
October,	11½	16½	13	......	......	......	15½	1	1½	......	......	12	2	......
November,	14	16	18½	......	......	......	7½	1	1	2	......	4	8	......
December,	8	23	22	1	1	......	6	1	......	......	......	1	9	......
	171	194	182	3½	2½	4	131½	5½	18	6½	......	91	42	......

1834.

MONTHS.	WEATHER.		WIND.											
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned.	Rain.	Snow.	Rain and Snow.
January,	17½	13½	17½	......	......	......	10	......	2	1½	......	2	6	1
February,	17	11	13	......	......	1	12	......	......	2	......	3	4	1
March,	17	14	14½	......	......	......	15½	......	1	......	......	4	5	......
April,	17½	12½	20½	......	......	......	9½	......	......	......	......	7	1	......
May,	11½	19½	11½	......	6	......	11½	......	2	......	......	7	1	......
June,	14½	15½	15	1	1½	2	10	½	......	......	......	15	......	......
July,	21	10	17	......	......	......	13	1	......	......	......	12	......	......
August,	18½	12½	20	......	......	......	10	1	......	......	......	4	......	......
September,	4	......	......	......	......	......	4	......	......	......	26	......	......	......
October,	12	20	10	......	......	......	9	......	1½	½	......	6	1	......
November,	10½	15	15	2	½	......	10	1	1½	......	......	5	5	1
December,	9½	19½	19½	1	......	......	9½	......	......	......	......	1	8	1
	170½	168½	183½	4	8	3	124	3½	8	4	26	69	31	4

1835.

MONTHS.	WEATHER.		WINDS.										THERMOMETER.							
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned.	6 o'clock A. M.	Noon.	6 o'clock P. M.	Highest.	Lowest.	Range.	Rain.	Snow.	Rain and snow.
January,....	15½	15½	12	......	......	......	10½	3	2½	2	......	......	......	......	......	......	......	......	......	....
February, ..	13½	14½	16½	......	......	......	9	2½	......	......	......	......	......	......	......	......	......	......	......	....
March, ...	13	18	19½	......	......	......	11½	......	......	1	......	......	......	......	......	......	......	......	......	....
April, ...	12½	17½	18	......	......	......	12	......	......	......	......	......	......	......	......	......	......	......	......	....
May, ...	16½	14½	17½	......	......	......	13½	......	......	......	......	47½	58	58½	70	30	40	8	......	....
June,.......	11	19	10	......	......	......	......	4	1	2	......	59½	69½	66½	84	46	38	12	......	....
July, ...	9	22	11	......	......	......	15½	4	......	½	......	61½	74½	74	82	48	34	15	......	....
August, ...	12	19	9	......	......	......	9½	4	1	7½	......	58½	70½	69½	82	47	35	12	......	....
September,.	15	15	14	......	......	......	9½	3	1½	2	......	46½	69½	54½	82	33	49	12	1	1
October, ...	15½	15½	11½	......	......	......	16½	1½	1	1½	......	44½	54½	52½	70	26	44	9	......	....
November,,.	11½	18½	20	......	......	......	8	......	2	......	......	28½	35½	33½	62	—13	75	2	5	....
December,..	12½	18½	16½	......	......	......	12	1	½	1	......	8	17	14½	39	—22	61	3	6	....
	157½	207½	175½	......	.....	......	124½	23	9½	16½	......	50.66			84	—22	106	73	12	1

1836.

MONTHS.	WEATHER		WINDS.									THERMOMETER.								
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned.	6 o'clock A. M.	Noon.	6 o'clock P. M.	Highest degree.	Lowest degree.	Range.	Rain.	Snow.	Rain and snow.
January, ...	10½	20½	21½	......	......	......	5½	......	2	2	......	11½	20½	20½	40	—12	52	1	9	1
February, ...	14	15	15	......	......	......	14	2	......	......	......	—6	19½	15½	40	—35	75	2	6	1
March, ...	18	13	13	......	......	1	15½	½	1	......	......	14	31	28½	46	—12	58	2	7	....
April, ...	13	17	12½	......	......	......	17	½	......	......	......	31	43½	41½	54	15	39	8	3	....
May, ...	15	16	12	......	......	......	13	......	1	......	.....	50	61	60	78	31	47	12	......	....
June, ...	16½	13½	8	1	......	2	19	......	......	......	......	53½	66½	66	81	42	39	6	......	....
July, ...	18	13	15	......	......	......	8	5	2½	½	......	16	76½	73½	89	48	41	7	......	....
August, ...	14	17	15½	......	......	......	11	1½	2½	½	......	52½	68	66½	80	39	41	5	......	....
September, .	14	16	9¾	......	......	......	15½	4	2	2	......	49½	52	57½	80	32	48	6	1	....
October, ...	12½	18½	12½	1	......	......	12½	2	3	......	......	33½	43½	41	66	14	52	12	2	....
November, .	8½	21½	14	1	......	......	7	3	1	4	......	27½	34½	33	55	15	40	5	1	1
December, ..	18½	12½	12½	......	1	4	13½	......	......	......	......	17½	24½	23½	50	—14	64	3	8	....
	172½	193½	158	1	1	7	156½	18½	15	9	......	40.61			89	—35	124	69	37	3

1837.

MONTHS.	WEATHER.		WINDS.									THERMOMETER,								
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned	6 o'clock A. M.	Noon.	6 o'clock P M.	Highest.	Lowest.	Range.	Rain.	Snow.	Rain and Snow.
January,....	13½	17½	27	......	1	......	3	......	......	......	......	1½	12	12½	36	—31	67	......	7	....
February, ..	11	17	15	......	......	......	8½	2	2½	......	......	12	11	21½	38	—16	54	4	10	2
March, ...	14	17	15	......	......	......	16	......	......	......	......	18	32	21½	60	—18	68	6	2	1
April, ...	12	18	20½	......	......	......	8	1	½	......	......	31	46	44½	68	18	50	8	7	4
May,........	13½	17½	14½	......	......	1	14½	1	......	......	......	44½	44½	55½	78	22	56	13	......	....
June, ...	12	18	11½	......	......	......	16	1	½	1	......	57½	71½	70½	82	43	39	11	......	....
July, ...	14½	16½	17	......	......	......	10	1	......	3	......	......	......	......	......	......	......	12	......	....
August, ...	11½	19½	9½	......	......	......	19	½	......	2	......	......	......	......	......	......	......	10	......	....
September,..	18	12	12	......	......	......	13	3	......	2	......	......	......	......	......	......	......	5	......	....
October, ...	12	19	14	......	......	......	12½	2½	......	2	......	......	......	......	......	......	......	10	2	....
November,..	6½	23½	15	......	......	......	14	1	......	......	......	......	......	......	......	......	......	10	3	....
December,..	11½	19½	16½	......	......	2	12½	......	......	......	......	......	......	......	......	......	......	4	8	1
	150	216	187½	......	1	3	147	13	3½	10	......	35.94			82	—31	113	93	39	8

1838.

MONTHS.	WEATHER.		WINDS.									THERMOMETER.								
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned	6 o'clock A. M.	Noon.	6 o'clock P. M.	Highest.	Lowest.	Range.	Rain.	Snow.	Rain and Snow.
January,	10½	20½	13½	......	......	......	17½	......	......	......	......	......	......	......	......	......	......	1	3	1
February,	13	15	18	......	......	......	10	......	......	......	......	......	......	......	......	......	......	......	6	....
March,	15	16	20	......	......	......	11	......	......	......	......	......	......	......	......	......	......	1	6	....
April,	15½	14½	16½	......	......	......	13½	......	......	......	......	......	......	......	......	......	......	6	5	....
May,	13	18	14½	......	......	......	13	2	1½	......	......	......	......	......	......	......	......	10	......	....
June,	16	14	20	......	1	......	7	......	2	......	......	63¾	74½	64	80	50	30	13	......	....
July,	16	15	18	......	......	......	10½	½	1½	½	......	61	76½	73	88	53	35	11	......	....
August,	15	16	11	......	......	......	15	1	1	3	......	57⅔	71⅔	67⅔	85	44	41	7	......	....
September,	18	12	17	1	......	......	10	1	......	1	......	50⅓	64⅔	62¼	77	36	41	5	......	....
October,	9½	21½	13½	......	......	1	13½	......	1	2	......	27½	48	37	68	28	40	10	2	1
November,	12	18	13½	......	......	......	11½	1	2	2	......	26	33	30½	57	— 2	59	7	4	....
December,	13½	17½	15	......	......	......	12½	1	......	2½	......	10½	17¾	17½	38	—14	52	1	7	....
	167	198	180	1	1	2½	145	6½	9	11	......		55.52					77	33	2

1839.

MONTHS.	WEATHER.		WINDS.									THERMOMETER.								
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned.	6 o'clock A. M.	Noon.	6 o'clock P. M.	Highest.	Lowest.	Range.	Rain.	Snow.	Rain and Snow.
January, ...	13½	17½	14½	......	......	......	13	3	......	½	......	13	18	17⅔	46	—22	68	6	3	1
February, ...	11½	16½	8	......	......	......	18	2	......	......	......	19⅔	27⅔	30½	44	—12	56	1	7	1
March, ...	16	15	13	......	......	......	16½	......	½	1	......	24⅔	31	29½	49	—14	63	6	7	2
April, ...	14	16	13½	......	......	......	14½	......	......	2	......	36½	54½	50¼	69	27	42	8	3	1
May, ...	14½	16½	9	......	......	......	22	......	......	......	......	42½	58⅓	58	71	76	45	14	......	....
June, ...	9	21	17	......	......	......	10	......	2	1	......	......	......	......	......	......	......	14	......	....
July, ...	16½	14½	4	......	......	......	7	1	......	1	18	......	......	......	......	......	......	15	......	....
August, ...	18	13	15½	......	......	......	10	1	......	½	4	......	......	......	......	......	......	9	......	....
September, ..	10½	19½	15	......	......	......	15	......	......	......	......	......	......	......	......	......	......	12	......	....
October, ...	17½	13½	10½	......	......	1	16½	......	2	1	......	40	52⅔	52	66	19	47	6	......	....
November, ..	11	19	14½	......	......	......	11	½	3	1	......	29½	35⅓	27	56	15	41	5	8	1
December, ..	14	17	25½	2	......	½	1½	½	......	1	......	20⅓	26⅔	26½	48	— 7	55	3	5	....
	166	199	160	2	......	1½	155	8	7½	8	22	34.2			71	—22	93	97	33	6

1840.

MONTHS.	WEATHER.		WINDS.									THERMOMETER.								
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned	6 o'clock A. M.	Noon.	6 o'clock P. M.	Highest.	Lowest.	Range.	Rain.	Snow.	Rain and Snow.
January,....	16	15	18	......	......	......	9	1	1	2	......	1¾	11⅔	11¾	38	—33	71	2	7	1
February,...	10½	18½	9	......	......	1	16	½	......	2½	......	22¼	31⅓	28	49	—16	65	7	1	....
March, ...	17	14	12	......	......	1	14½	3	½	......	......	23¼	34⅔	32¼	47	— 4	51	6	6	1
April, ...	15	15	9½	......	......	......	15½	2½	1	1½	......	35¾	49	47¾	78	20	58	12	1	1
May,........	18	13	17	......	......	1	12½	......	½	......	......	45¼	62	58	84	34	50	7	......	....
June, ...	15½	14½	15	......	......	1	11½	......	......	2	......	54	70	66⅓	86	40	46	14	......	....
July, ...	17	14	10½	......	......	......	15	2	2½	1	......	60	77	73¼	90	47	43	10	......	....
August, ...	15	16	3	......	......	......	17	2	4	5	......	61½	76¼	74½	86	52	34	10	......	....
September, .	13	17	10	......	......	1	14	1	......	4	......	49	61⅔	59⅔	75	35	40	9	......	....
October,....	13	18	11	......	......	1	10½	6	½	2	......	40½	50⅔	48⅓	66	28	38	11	2	1
November, .	8½	21½	15	......	......	1	14	......	......	......	......	30⅓	37⅔	56⅔	48	18	30	5	5	2
December,..	10½	19½	16½	......	......	½	9	......	1	4	......	16½	23⅓	21½	39	—11	50	3	10	....
	169	196	146½	......	......	7½	158½	18	11	24½	......	44.28			90	—33	123	96	32	6

1841.

MONTHS.	WEATHER.		WINDS.										THERMOMETER.								
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned	6 o'clock P. M.	Noon.	6 o'clock P. M.	Highest.	Lowest.	Range.	Rain.	Snow.	Rain and Snow.
January, ...	8½	22½	11	......	.....	½	13	2½	2	2	......	21[illegible]	27[illegible]	27[illegible]	46	—22	68	2	10	....
February, ..	12	16	16½	......	......	......	10½	1	......	......	......	11[illegible]	23[illegible]	21[illegible]	40	—14	54	......	10	....
March, ...	16	15	15½	1	......	......	13½	½	......	½	......	19[illegible]	32	31	48	— 7	55	4	3	....
April, ...	9½	20½	12	......	......	......	15	......	......	3	......	32[illegible]	45[illegible]	43	62	15	47	8	6	....
May, ...	10½	20½	17½	......	......	3	8½	......	......	2	......	44[illegible]	58[illegible]	54	82	30	52	10	1	....
June, ...	9	21	10½	......	......	......	14½	2½	......	2½	......	57[illegible]	73[illegible]	69	84	41	43	14	......	....
July, ...	18	13	13½	......	......	1	8½	2	1½	4½	......	58[illegible]	73[illegible]	71[illegible]	86	46	40	9	......	....
August,.....	18½	12½	9½	4	......	......	14½	1	......	2	......	59	76[illegible]	71[illegible]	86	44	42	7	......	....
September, .	14½	15½	13½	......	......	......	12	2	1½	1	......	51[illegible]	68[illegible]	60[illegible]	78	43	35	8	......	....
October,....	10	21	17	......	.....	1	10	1	......	2	......	37[illegible]	47	45	60	18	42	6	1	....
November, .	7	23	17	1	......	......	10	1	......	1	......	31[illegible]	37	35	62	16	46	3	6	1
December,..	12	19	12	......	1	......	12½	3½	......	2	......	25[illegible]	27[illegible]	26[illegible]	44	—10	24	7	9	3
	145½	219½	165½	6	1	5½	142½	17	5	22½	......	44.36			86	—22	108	78	46	4

1842.

MONTHS.	WEATHER.		WINDS.									THERMOMETER.								
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned	6 o'clock A. M.	Noon.	6 o'clock P. M.	Highest.	Lowest.	Range.	Rain.	Snow.	Rain and Snow.
January,....	16½	14½	11½	1	......	......	8½	4½	1	4½	......	12	22	22½	43	—19	62	3	9	1
February,...	9½	18½	7	......	......	1	10½	1½	......	8	......	21	29½	28½	45	— 4	49	8	8	1
March, ...	14	17	13	......	......	......	11½	2	3	1½	......	28½	40	34	57	10	47	7	6	2
April, ...	15	15	9½	2	......	......	12½	2½	1	2½	......	34½	48	48½	77	12	65	5	2	1
May, ...	13	18	3½	......	......	......	13½	6	1	7	......	42½	59	54½	73	32	41	12	1	....
June, ...	14	15	1	......	......	......	15	4	2	8	......	52½	68½	64	82	36	56	12	......	....
July, ...	15½	15½	7	......	......	......	10	9	......	5	......	61½	76½	69½	86	50	36	11	......	....
August,.....	14½	16½	15½	......	......	......	11½	1	1	2	......	60	73½	68½	82	47	45	16	......	....
September, .	11	19	12½	½	......	1	10½	4½	1	......	......	48½	60	56½	80	28	52	15	......	....
October, ...	17½	13½	6	......	......	......	15	4½	½	5	......	39	49½	48	66	28	38	7	......	....
November, .	14	16	11	2½	......	......	5	2½	......	5	5	30	35½	34	46	12	34	5	7	2
December,..	8½	22½	17	1	......	......	......	......	......	2	......	13½	20½	20½	37	—10	47	......	16	....
	163	201	114½	7	......	2	123½	42	10½	50½	5	43.61			86	—19	105	101	49	7

1843.

MONTHS.	WEATHER.		WINDS.									THERMOMETER.								
	No. of Fair days.	No of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned	6 o'clock A. M.	Noon.	6 o'clock P. M.	Highest.	Lowest.	Range.	Rain.	Snow.	Rain and Snow.
January, ...	13½	17½	14½	......	......	......	12½	2	......	2	......	20⅔	28⅔	29⅓	46	—25	71	5	6	....
February, ..	14½	13½	13	......	......	......	12½	......	½	2	......	4	14	14⅔	38	—20	58	......	12	....
March, ...	15	16	14	......	......	......	11	1	½	4½	......	16⅔	28⅓	27	42	— 2	44	1	15	1
April, ...	11½	18½	18	......	......	1	8½	2½	......	......	......	34⅓	47⅓	45⅓	64	4	60	6	4	....
May, ...	17	14	10½	2	......	......	12	2½	......	4	......	44⅓	61⅓	57	81	32	49	8	2	1
June, , ...	15	15	10½	1	......	1	10½	3	......	4	......	54⅔	70⅓	67⅓	90	38	52	13	......	....
July, ...	14	17	8	......	......	......	7½	9	2	4½	......	56⅓	73⅓	67⅓	89	46	43	9	......	....
August, ...	13	18	11	......	......	......	4	7	......	9	......	65⅔	77⅓	70⅓	83	50	33	14	......	....
September, .	17½	12½	11½	......	......	......	9	6	2	1½	......	51⅓	63⅔	64⅓	82	30	52	5	......	....
October, ...	11½	19½	13½	......	......	1	......	1	½	4½	......	57⅓	47	44⅓	63	24	39	11	2	2
November, .	6½	23½	13	......	......	......	13	......	1	3	......	27⅓	33⅔	32	45	6	39	5	7	1
December, ..	7½	23½	14½	......	1	......	9½	1	1	4	......	21⅓	28	26⅓	35	— 9	44	......	9	....
	156½	208½	152	3	1	3	110	35	7½	43	......	43.7			90	—25	115	77	57	5

1844.

MONTHS.	WEATHER.		WINDS.									THERMOMETER.								
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned	6 o'clock A. M.	Noon.	6 o'clock P. M.	Highest.	Lowest.	Range.	Rain.	Snow.	Rain and Snow.
January, ...	17½	13½	14½	1	......	......	10	......	......	5½	......	3½	11½	13	38	—26	64	3	10	1
February, ...	14	15	18½	......	......	½	2½	1½	2	4	......	10	21	24½	40	—20	60	......	4	....
March, ...	11	20	16	......	......	......	10	1½	½	4	......	25	34¾	33½	43	3	40	5	6	....
April, ...	20½	9½	6½	......	......	1	15	2	½	5	......	36	54	51½	69	2	67	7	......	....
May, ...	9½	21½	5½	......	......	......	17½	......	½	7½	......	48½	63½	58½	76	30	46	15	......	....
June, ...	11½	18½	11	......	......	......	8	4	1½	5½	......	55½	69½	68½	86	40	46	13	......	....
July, ...	15	16	4½	......	......	......	9½	4	1	12	......	55	74½	68½	84	44	40	10	......	....
August, ...	9	22	4½	......	......	......	16½	4	......	6	......	57½	72	66½	78	46	32	18	......	....
September, .	21	9	9	......	......	......	17	......	......	4	......	50¼	64	62½	78	28	50	9	......	....
October, ...	12½	18½	13	......	......	......	15½	......	......	2½	......	40½	50½	48½	62	28	34	12	1	....
November, .	8	22	12½	.....	1	......	12	½	3	1	......	30⅓	36⅓	35	48	7	41	9	4	....
December, ..	10	21	10	½	......	1	......	1	1	6	......	19½	25½	25½	41	— 6	47	5	6	1
	159½	206½	124½	1½	......	2½	133½	18½	10	62	......	43.83			86	—26	112	106	31	2

1845.

MONTHS.	WEATHER.		WINDS.									THERMOMETER.								
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned	6 o'clock P. M.	Noon.	6 o'clock P. M.	Highest.	Lowest.	Range.	Rain.	Snow.	Rain and snow.
January, ...	11½	20½	13	......	......	......	13	......	1	4	......	16	24	19½	42	—10	52	3	11	....
February, ..	12	16	14	......	......	......	11	......	......	3	......	17½	25½	25	46	—20	66	5	6	1
March, ...	12	19	4½	......	......	......	17½	1½	1	6½	......	23½	36½	35	56	— 1	57	6	7	1
April, ...	6½	23½	7	......	......	......	10½	1½	1½	9½	......	34½	46½	43½	65	20	45	7	8	....
May, ...	14½	13½	4½	......	......	......	11½	3	3	9	......	42½	57½	36½	83	31	52	9	1	....
June, ...	14½	15½	1½	......	......	1	9	4	6½	9	......	57½	70½	66½	84	41	43	10	......	....
July, ...	13	18	2	......	......	......	8½	7½	3	10	......	60½	75½	70½	88	50	38	15	......	....
August, ...	12	19	1	......	......	......	5½	6½	10	8	......	60	73½	70½	86	50	36	10	......	....
September, .	8½	21½	1	......	......	......	8	5	3	13	......	49½	61	58	75	36	39	13	......	....
October, ...	18	13	3	......	......	......	11	11	2	4	......	42	52	52½	73	19	54	7	1	....
November, .	8½	21½	3	......	......	2	6½	7	2	9½	......	32½	42	40½	66	10	56	18	2	1
December, ..	10½	20½	7	......	......	......	5	3	......	16	......	10½	17	17	35	—28	63	2	11	2
	142½	223½	61½	......	......	1	117	40	32	101½	......	43.44			88	—28	116	100	47	5

1846.

MONTHS.	WEATHER.		WINDS.									THERMOMETER.						Rain.	Snow.	Rain and Snow.
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned.	6 o'clock A. M.	Noon.	6 oclock P. M.	Highest.	Lowest.	Range.			
January, ...	10	21	9	......	......	½	9½	1	......	11	......	12	21	21⅓	39	—16	55	2	10	1
February, ..	13¾	14¼	2½	......	......	1	2½	3½	3	15½	......	3½	18	18	40	—20	60	......	7	....
March, ...	12½	18½	2½	......	......	......	6	3	4	15½	......	23¾	36¾	35¾	49	—16	65	8	3	....
April, ...	19	11	1	......	......	......	6½	4½	3	15	......	33	53¾	51¾	71	24	57	8	1	....
May, ...	8½	22½	5	......	......	2	4	9½	4	6½	......	49	69	59⅓	90	31	59	13	......	....
June, ...	12½	17½	8	......	1½	......	4	3	8½	5	......	58⅓	74	69	84	42	46	13	......	....
July, ...	15	16	1	......	1	......	14	4	7	11	......	60⅔	77	69⅓	86	50	36	9	......	....
August, ...	17	14	1	......	......	......	5	9	2	14	......	60	76⅓	71⅓	88	51	37	5	......	....
September, .	14	16	1	......	......	......	4	9	4	12	......	55¾	69⅓	65	85	41	44	11	......	....
October, ...	10	21	1	......	½	......	½	12	7	11	......	39¾	49⅓	47¼	73	22	51	9	3	2
November, .	8½	21½	5	......	......	½	10½	5½	2	6½	......	34⅓	43	42¾	59	20	39	5	6	....
December, ..	8½	22½	2	......	......	......	6½	3½	2	17	......	19	27	23¾	40	— 3	43	4	12	1
	149	216	39	......	3	4	72½	56½	46½	140	......	45.44			90	—20	110	87	42	4

1847.

MONTHS.	WEATHER.		WINDS.									THERMOMETER.								
	No. of Fair days.	No. of Cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned	6 o'clock A. M.	Noon.	6 o'clock P. M.	Highest.	Lowest.	Range.	Rain.	Snow.	Rain and Snow.
January,....	13½	17½	2	......	......	......	8	7½	5	8½	......	14½	23½	21½	41	—14	55	4	8	....
February, ..	8	20	......	......	......	......	6	4½	5	12½	......	13½	20½	23¼	46	—22	68	2	9	1
March,......	18½	12½	1	......	......	......	1	3½	5	20½	......	17	30	29¼	41	— 6	47	5	8	2
April, ...	9½	20½	......	½	......	½	2	11	2	14	......	29¾	42	40	56	0	56	11	6	1
May, ...	13	18	2	1	1½	1	2	9	6½	7	......	46	63½	58½	76	32	44	7	......	....
June, ...	10	20	......	......	......	......	6	12	5	7	......	56½	69	64½	85	45	40	13	......	....
July, ...	11	20	5	6	......	......	8	6	2½	3½	......	62½	78½	72	90	47	43	12	......	....
August, ...	16	15	......	......	......	1	......	14½	3	12½	......	59½	74½	69½	84	50	34	12	......	....
September, .	10½	19½	4	......	......	2	7½	5½	1½	9½	......	52	63½	60	90	42	48	8	......	....
October, ...	14	17	4	......	½	2½	7	5	6	6	......	40	50	46	63	17	46	13	......	....
November, .	9½	20½	......	......	......	2	4½	6	6½	11	......	37	44	41½	62	2	60	10	4	....
December,..	10	21	8	......	......	......	7½	7	2	6½	......	25½	31	30½	57	— 3	60	9	[illegible]	2
	143½	221½	26	7½	2	9	59½	91½	50	118½	......	44.44			90	—22	112	106	42	6

1848.

MONTHS.	WEATHER.		WINDS.									THERMOMETER.								
	No. of fair days.	No. of cloudy days.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned	6 o'clock A. M.	Noon.	6 o'clock P. M.	Highest.	Lowest.	Range.	Rain.	Snow.	Rain and Snow.
January, ...	16½	14½	1	......	......	1½	6½	8	1	13	......	18	25½	25½	48	—32	80	4	8	2
February, ..	18	10	8	......	1	......	......	2	1	16	......	11¾	23½	23½	40	— 8	48	1	11	....
March, ...	14½	16½	7	......	......	......	2	3½	4	14½	......	21	32¼	30½	58	— 8	66	8	10	2
April, ...	19½	10½	......	......	1	......	......	6½	2	20½	......	34¼	49	46¾	68	22	46	5	1	....
May, ...	5½	25½	3	2½	......	1	8	7	4	5½	......	49¾	62¾	59	81	32	49	16	......	....
June, ...	12½	17½	1	2½	......	......	2½	7	7½	9½	......	57	71½	65	87	36	51	14	......	....
July, ...	12½	18½	1	½	2	2½	1½	12	3½	8	......	60¾	75	67¾	85	51	34	15	......	....
August, ...	21½	9½	4	......	......	......	......	15	3	9	......	53½	73¾	71	84	48	36	6	......	....
September, .	12	18	1	½	½	1½	2	7½	2½	14½	......	48¾	60	58¼	76	31	45	15	......	....
October, ...	11½	19½	8½	......	½	......	1	8	1½	11½	......	41	51	49¾	66	26	40	13	......	....
November, .	12	18	8½	½	......	......	5	3½	2½	10	......	30	36¾	37	52	16	36	5	6	....
December,..	8½	22½	2	......	......	1	5½	4½	8½	9½	......	27	31½	37½	49	—10	59	8	10	2
	164½	200½	45	6½	5	7½	36	84½	41	141½	......	44.83			87	—32	119	107	56	6

1849.

MONTHS.	THERMOMETER.						WINDS, (NO. OF DAYS.)									WEATHER, (NO. OF DAYS.)				
	6 o'clock A. M.	Noon.	6 o'clock P. M.	Highest degree.	Lowest degree.	Range.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	No. days not returned	Clear.	Cloudy.	Rain.	Snow.	Rain and snow.
January, ...	7	16½	16½	43	—14	57	4	1		......	4	6	2½	13½	......	13½	17½	2	12	....
February, ..	4	18¼	17½	42	—21	63	4½	1	1½	......	7	3½	½	10	......	11	17	......	13	....
March, ...	27½	36⅔	35¾	60	3	57	3½	2	......	1	6	7½	½	10½	......	10	21	8	9	2
April, ...	32½	46	42	57	18	39	......	1	1½	1	1	10	3	13½	......	14	16	7	7	....
May, ...	46	60¾	55½	74	26	48	1	1	......	1	5	7	4½	11½	......	6½	24½	15	......	....
June, ...	58¾	76¾	60	90	46	44	9	......	......	......	12	3	2	4	......	17	13	12	......	....
July, ...	60¼	78¾	78	94	48	46	1	......	......	1	1	14½	3	10½	......	20	11	11	......	....
August, ...	60¼	75¾	71	82	52	30	......	½	......	2	2	14½	5	7	......	19½	11½	12	......	....
September, .	49½	63¼	59¾	74	38	36	......	......	......	......	......	11½	4	14½	......	18½	11½	9	......	....
October, ...	41	49¼	50¼	62	32	30	2	......	......	1	3	12	2	11	......	11½	19½	12	1	....
November, .	38½	44½	45	57	26	31	1½	......	3½	......	4	13½	½	7	......	11½	18½	8	2	....
December, ..	13	24	23	40	—16	56	1½	......	......	1	4	4½	1½	18½	......	8	23	3	17	....
		44.13		94	—21	115	28	6½	5½	8	49	107½	29	128½	......	161	204	99	61	2

"MISCELLANEOUS OBSERVATIONS.—I expected the difference between my early account of the prevailing winds, and that for a few years past would be noticed. The wind through this part of the valley of the Connecticut, generally blows nearly north or south, varying a trifle only on the surface of the earth. A few years since I observed that the wind on the surface of the earth varied very much from the course of the clouds, and I commenced conforming my journal to the course of the high winds. The course of the clouds is a more sure indication of the coming weather, whether fair or stormy, than the lower winds. I have frequently remarked that when the clouds flew directly from west to east, the wind on the surface of the earth blew sometimes from the north and sometimes from the south. And when the wind came directly from the east the same phenomenon was observable.

"Our winds, as their course is indicated by the clouds, blow many more days in the year from the southwest, west and northwest, or between those points, than from all other quarters of the heavens. As indicating the course of the clouds my early records are erroneous. They merely show the course of the winds through the *Oxbow*."

1824. September 24. Moosehillock covered with snow.
1825. March 15. Robins appeared.
1826. The sun did not shine from February 27 to March 10, twelve days.
April 12. Connecticut river frozen over on the night of the 12th April, the first time it was ever known to freeze over in April, after being clear.
May 14. Bobolinks first came.
August 28. 12 inches of rain fell.
1827. May 1. Snow fell 12 inches deep.
May 8. Moosehillock white with snow.
October 7. Moosehillock covered with snow.
1828. October 12. Wild geese flew South.
1830. May 10, 23, 25, 26. Frost nights.
March 21. Robins appeared.
October 25. Snow on Moosehillock.
November 11. Wild geese flew South.
December 11. Aurora very brilliant.
1832. March 17. Robins appeared.
April 20. Hills covered with snow.
From the 25th November, 1831, to January 2, 1832, it did not thaw at all any day.
August 25. Moosehillock covered with snow.
August 26. Hard frost.

1832. November 30 and December 1. Snow fell 18 inches deep.
1833. June 9 and 11. Snow on Moosehillock.
November 13. Bright scintillations in the sky overhead; star shoots, sparkled and darted in every direction.
1834. February 22. A thunder shower at 10 o'clock P. M.
March 5. Aurora.
March 6. Robins appeared.
April 27. Snowed on the hills.
May 13. Hills white with snow.
May 15. Snow fell two feet deep; sleighs were used all next day, the 16th.
October 6. Snow on Moosehillock.
1835. May 6. Swallows came.
May 8. Wrens came.
November 17. Aurora.
1836. February 17 and 22. Aurora.
April 22. Aurora.
April 1. Wild geese flew north.
April 2. Robins appeared.
April 5. Peedees appeared.
May 11. Bobalinks appeared.
August 10. Frost.
August 12 and 30. Aurora.
September 3. Snow on Moosehillock.
October 9. Moosehillock covered with snow.
1837. January 25. Aurora, splendid arch, from west to east.
January 26. Aurora at 8 o'clock.
April 6. Aurora.
April 21. Aurora.
May 6. Wrens came.
May 12. Bobalinks and golden robins appeared.
May 21. Plum trees blossomed.
August 25. Aurora 9 o'clock P. M.
September 13. Snow on Moosehillock.
September 20. Moosehillock white with snow.
1838. February 21. Aurora 8 o'clock P. M.
March 25. Robins appeared.
April 4. Blackbirds appeared.
April 7. Frogs peeped.
April 12. Aurora 9 o'clock P. M.
April 30. Aurora.
May 1. Aurora.
May 9. Wrens came.

September 14, 15, 16. Aurora in the evening.
October 28. Snow on the hills.
December 13, 14. Aurora in the evening.
1839. January 12. At noon mercury 80° above zero
January 14. Aurora.
March 15. Aurora.
April 3. Blackbirds appeared.
April 16. Aurora, slight.
April 21. Aurora, slight.
August 28. Slight aurora.
August 29. Frost.
September 3. Bright aurora.
September 4. Slight aurora.
September 14. Slight aurora.
November 18. Aurora in the morning.
1840. January 3. Aurora.
January 3. Aurora.
January 4. Aurora.
April 24. Aurora.
May 9. Mountains in New Hampshire white with snow.
September 1. Slight aurora in evening.
September 22. Moosehillock white with snow.
October 20 and 22. Slight aurora.
December 21. Aurora morning and evening.
1841. January 8. Great freshet; Connecticut broke up and overflowed the meadows.
February 8. Aurora.
February 15. Aurora.
Februry 23. Aurora.
March 11. Slight aurora.
March 14, 15, 17, 22, 24. Aurora.
April 30. Hills white with snow.
June 4. Frost, morning.
November 28. Halo round the moon at 8 P. M.
1842. January 11, 15. Aurora.
January 13. A meteor burst at 6 A. M. a little west of north. about ⅓ of the distance from the horizon to the north star.
June 6. Snow on Moosehillock.
June 12 and 14. Moosehillock white with snow.
September 23. Snow on Moosehillock.
November 2. Shooting stars evening; 5 about 9 o'clock P.M.
November 21. Aurora.

1843. March 4 and 29. Aurora.
March 20. Comet's tail to be seen all the evening.
April 3. Good sleighing.
April 6. Snowed ten inches.
May 31. Snow fell three inches deep on the high lands.
June 1. Moosehillock white with snow.
July 2. Hail storm; hail stones six inches in circumference.
July 20. Frost in the morning.
July 25. Aurora.
September 1. Moosehillock white with snow.
September 30. Slight aurora with streamers at 8 o'clock P. M.
October 23. Snow fell 12 inches deep.
1844. March 29. Aurora.
May 19. Snow still lies on Moosehillock.
July 5. A slight frost.
September 17. Aurora.
September 27. Snow on Moosehillock.
September 30. Snow on the hills.
1845. January 9. Aurora in the evening.
February 24 and 25. Aurora.
April 8. Snowed 12 inches.
April 16 and 17. Snowed.
May 30. Moosehillock white with snow.
May 31. White frost; froze hard.
September 22. Snow on Moosehillock.
October 21. Moosehillock white with snow.
October 21. Aurora, evening.
1846. January 23. Aurora.
February 14 and 25. Aurora.
May 12. Moosehillock white with snow.
October 19. Moosehillock white with snow.
October 19. Aurora.
October 22. Aurora, morning.
November 26. Snowed ten inches.
December 9. Aurora.
1847. March 8 and 19. Aurora.
June 12. Aurora.
September 10. Moosehillock white with snow.
1848. January 28. Aurora.
February 8, 21, 25. Aurora.
April 6, 29, 30. Aurora.
May 15. Moosehillock white with snow.

1848. June 1. Moosehillock white with snow.
August 21. Aurora.
September 4. Aurora.
September 16. Snow on Moosehillock.
October 23, 25, 27, 28. Aurora.
November 2. Aurora.
November 17. Brilliant aurora borealis from eight to eleven o'clock, evening; the illumination extended over the sky east, west, north and south, and united in the zenith in a canopy, or point.
December 23. Aurora.
1849. January 14. Bright aurora in the evening.
February 13, 18, 19, 21. Aurora.
May 12. Aurora.
September 8, 18. Aurora.
September 27. Moosehillock covered with snow.
October 13, 14, 15, 18. Aurora.
Nov. 28. Bright aurora at 5 o'clock A. M.

III. METEOROLOGICAL NOTES, KEPT AT SOMERVILLE, ST. LAWRENCE CO., FROM MARCH 25, 1849, TILL THE END OF THE YEAR.

(BY FRANKLIN B. HOUGH, M. D.)

March 25, Aurora first seen behind clouds at 8 o'clock 10 minutes; No arch. It clouded up soon after, and the aurora was not seen again till near morning. 26th. Aurora, partly concealed by clouds. A diffused brightness in the north without arch. By 9½ o'clock it had passed into the northwest, and was brighter. It remained without perceptible change during the night.

27, Narrow belts of cirrus clouds observed during the day, which at 9 o'clock in evening were seen fringed with auroral light.

30, A bright aurora seen between belts of cirrus clouds in the evening, in the northwest; 30th, Robins first heard.

April 2, A mass of auroral light with a single streamer, both of which were transient, observed at 10 o'clock 25 minutes in evening. Sky soon after rapidly overspread with a haze of cirro cumulus clouds. 3d, Halo at 4 P. M.; 4th, Smoky and foggy. Frogs first heard; 6th, Parhelion north of sun just before sunset; 7th, Solar and lunar haloes; 8th, Zodiacal light, very bright; 9th, Solar halo. Lunar halo in evening. 11th, Martins first seen. Zodiacal light very bright; 12th, Parhelion and halo in P. M.; 13th, Aurora observed throughout the evening in a narrow opening between the clouds. 14th, Faint halo in P. M.; 16th, at 10½ o'clock observed an aurora east of north, extending about 130° along the horizon. No arch or streamers noticed. Clouds above and below the aurora part of evening.

17, Halo in afternoon. An aurora as last evening, mostly obscured by clouds.

19, Faint aurora behind the clouds in north soon after twilight. It disappeared in a short time.

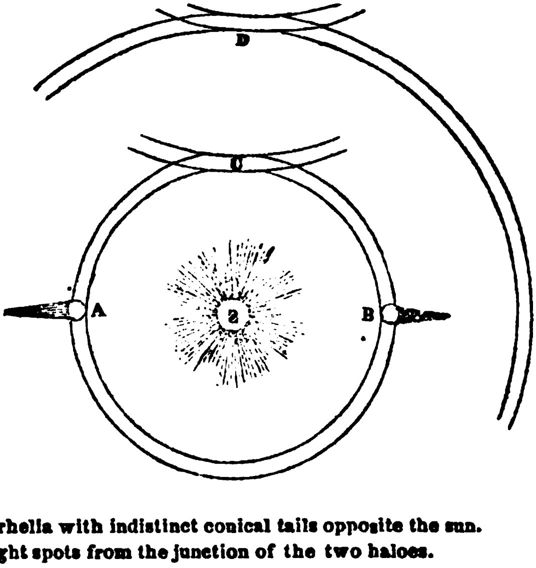
20, Moderately bright aurora, from dark till after 11 o'clock. No motion observed, no streamers. Arch very distinct and low. A very black cloud lay across the brightest part of the arch, on the east of north.

21, Very brilliant parhelion north of sun, attended with a fainter parhelion on the opposite side of the sun, and a colored halo. The parhelion was remarkably elongated in a horizontal direction. It lasted from 8 till 11 o'clock. In the afternoon the halo reappeared, without the parhelion.

26, Solar and lunar haloes, with parhelia.

28, Thunder shower in morning.

May 1, Solar halo; 2d, Swallows first seen; 3d, solar halo in A. M. Rain in P. M. The halo of the 3d inst. was complex, as represented in the margin. It was observed about 8 o'clock A. M. Every part was irised.



A B, Parhelia with indistinct conical tails opposite the sun.
C D, bright spots from the junction of the two haloes.
These two arcs, C and D, appeared to have the zenith for their centre.

May 5, Halo in A. M. and evening. Solar column at sunset red.

8, Rain in evening, .25 of inch; 13th, 14th, rainy; 17th, showery in P. M.; 20th, smoky and very warm; 22nd, 23d, 24th, rainy; 30th, rainy in night.

June 1, Thunder and rain in night; 2d, thunder shower in night; 3d, thunder shower in night; 4th, bright solar halo in A. M.; 9th, solar halo in forenoon; 10th, faint solar halo in A. M.; 14th, faint streamers and arch of aurora between 8 and 10 o'clock P. M.; 15th, thunder and rain in P. M.; 16th, thunder shower in P. M.; 17th, late in the evening a faint aurora, without arch or streamers; 18th, foggy in morning; a white halo and parhelion north of sun from 6 till 7¼ A. M.; 21st, six meteors, all small, at night; 23d, three small meteors in evening; 24th, parhelion north of sun at 6 P. M.; 25th, one small meteor in evening; 29th, faint trace of an aurora, low in the north very late.

July 2. Thunder shower from the north in P. M.; 6th, solar halo in P. M.; 9th, aurora in evening; 12th, small meteor, 30° high in S W; at 9 o'clock 10 m. P. M, aurora, arch indistinct, centre of arch W of N, streamers faint; 13th, thunder shower between 9 and 10 o'clock, evening; 14th, very faint aurora late; 18th, solar halo in P. M.; 20th, thunder and rain in P. M.; 23d, brilliant aurora. As the twilight faded away, an indistinct arch of light was observed, which, about 10 o'clock had become very perfect. The outlines were distinct, with a band of darker shade in the middle, which gave it the appearance of a double arch. A luminous patch of light was seen below the arch, at 10 o'clock 5 m., progressing slowly eastward.

A very bright streamer observed at 10 o'clock 16 m., which remained without motion a short time, and then vanished. The arch by 10 o'clock 16 m., had become higher, and much broken, being indistinct in some places, and very bright in others. At 10 o'clock, 34 m., the arch had become broken up, and could no longer be traced, but the whole northern sky was filled with streamers, that shot up above Ursa Major. They were particularly brilliant on the west end, as far as Cor Coroli. Eastward there was a dark space below the imperfect arch, with occasional spots of auroral light, which would suddenly gleam out with brilliancy, and after streaming up to the height of 30°, disappear without changing their places. At 10 o'clock 45 m., the aurora presented broad sheets, like flame, flickering and flashing so rapidly, that the eye could scarcely keep pace with their motions. The aurora had at this time attained the height of 70°. A small meteor was seen a little north of the zenith at this time. At 11½ o'clock the aurora had entirely disappeared for the night. During the whole night the air was very clear, and the sky free from clouds.

24, Solar halo about 10 o'clock. Faint aurora behind clouds in evening; 25th, bright halo at 10 A. M.; hazy in P. M.; 26th, showery, thunder storms in several directions; 28th, solar halo 8 A. M.; 29th, very faint aurora, low in N E; 30th, thunder shower in evening.

Aug. 6, Brilliant halo at 1 P. M.; 8th, halo at 4 P. M., which lasted one hour; 9th, halo at 12 o'clock; 12th, aurora low in the north between 9 and 10 o'clock, when the sky became overcast with clouds; very dark clouds lay below the aurora; thirteen meteors were observed during the evening, three of which descended vertically, while ten moved nearly horizontally from E to W; a faint streamer observed 10° E of N; the mass of auroral light lay East of North.

14, Heavy thunder shower at 10 o'clock evening; 16th, solar halo in P. M.; five small meteors observed between twilight and 12 o'clock.

17, Faint aurora late in evening; 18th, aurora with a well-defined low but faint arch at 9 o'clock. A thunder shower to the South.

22, Solar halo in P. M.; 27th, faint aurora in evening.

31, Aurora not conspicuous on account of moonlight.

Sept. 3, Solar halo in A. M.; lunar halo in evening. 4th, halo in A. M.; 7th, aurora at 10½ o'clock; 8th, bright aurora behind clouds.

9, Aurora; arch none, or below the horizon. A few indistinct streamers, having a slow westward motion. These streamers have the horizon for their base. A small meteor seen in Ursa Major.

12, Very brilliant aurora, first noticed at 10 o'clock 25 m., when there was a low, entire arch, and the arc of another, extending through and above Ursa Major. It was entire only to the west. Very dark below the lower arch, a few streamers observed.

At 10 o'clock, 40 m., no streamers. The imperfect upper arch had become a luminous mass of light, a little more elevated. Three minutes after, a streamer appeared to the west, in Ursa Major, which lasted two minutes. At 10 o'clock, 45 m., the luminous mass above the arch had entirely disappeared. At 10 o'clock, 48 m., another streamer, west of the former one, and also several on the eastern extremity, commencing *below* the arch, in the dark space. The arch had raised about 20°, and was very irregular and broken A series of these streamers formed the lower limit of another arch, below the former, which at 10 o'clock 55 m., had become perfect on the eastern extremity, where it touched the horizon. The arch was still broken to the west, and several streamers had formed in Ursa Major.

At 11 o'clock 5 m., the lower limit of the arch had raised considerably, below which the sky was very dark. Within a minute afterwards, the arch began to settle, and its margin became studded with innumerable active streamers, which had a general eastward tendency, although some would move a moment to the west.

At 11 o'clock 10 m., another set of streamers began to form below the arch as before. Clouds forming to the west of the aurora.

At 11 o'clock 17 m., a narrow band of light, observed spanning the heavens from east to west, a little south of the zenith, about 3° wide, and of the whiteness and lustre of the galaxy. The aurora had extended eastward to Taurus. The northern sky lit up with a faint haze, and indistinct streamers.

At 11 o'clock 25 m., arch in north invisible, but numerous masses of light in a state of agitation, occupy the place of the arch.

The band of light slowly subsiding into the south.

The eastern sky to 10° S. of Taurus, luminous.

At 11 o'clock 29 m., the zenith and northern sky luminous with flickering masses of light. At 11 o'clock 35 m., the zenith full of streamers, which centre at β of Pegasus Four small meteors seen in the space of 5 minutes, in the auroral light. One minute later, two other meteors in Pegasus shooting from β.

At 11 o'clock 45 m., very luminous near γ cygnii, another small meteor, clouding up in the north. Light as far south as the middle of Cetus. An occasional flash over many degrees of space, like lightning. An imperfect arch spanning the heavens, like the former one, with its margin N of Algenib. It passed rapidly southward.

At 12 o'clock, nothing but a luminous steady light, low in the north.

The next morning, the sky was overspread with thin fleecy cirro cumulus clouds.

13, Small meteor near the zenith, at 9 o'clock 5 m.; 14th, Halo in P. M.; 15th, morning rainy; 16th, Aurora and lightning in evening. A low belt of clouds lay on the horizon, from N. E. to S. W., which was incessantly lit up with flashes of lightning; 95 flashes were counted in 15 minutes. An aurora, faint, steady, and diffused precisely like the first dawn of morning observed throughout the evening, in the north, above the lightning clouds. No thunder heard. No arch or streamers observed in the aurora. At 11 o'clock 25 m., it began to rain, with much lightning and heavy thunder. The shower lasted 15 minutes.

17, Aurora from 10 till 12½ o'clock evening; brighteness variable. No arch or streamers.

18, Brilliant aurora. Observed as twilight faded away, as a low arch. At 8 o'clock two arches were observed, one low, the upper 10 degrees higher, and both distinct except the upper one to the east. The interval was occupied by masses of auroral light, and numerous transient streamers, which sometimes extended below the lower arch.

They had a slow motion to the westward. Below the arch, the sky was very dark. At 8 o'clock 11 m., the lower arch was just above the horizon, the upper arch had disappeared, and there was seen nothing but an indistinct glow throughout the north.

At 8 o'clock, 17 m., several streamers a little to the west of Ursa Major, shone conspicuously. They had a distinctly *red* tinge. The remainder of the aurora was of a yellowish white. At 9 o'clock 30 m., there was still a low arch in the north without streamers. The mass of light, and the centre of the arch, had moved considerably to the west.

At 3 o'clock the arch appeared double, or composed of two arcs, one on the east, and the other on the west. The eastern segment was broken up, and disappeared two minutes later; and the western arc presented a succession of bright masses, and short broad streams.

At 3 o'clock 6 m., the extreme west of the arc was filled with active streamers, which had a progressive motion eastward.

At 3 o'clock 10 m., the whole line was occupied by flashing and flickering light. The aurora continued till daylight.

18, First frost of autumn in night; 21st, faint parhelion N of Sun, 4, P. M. Lunar halo in evening; 22d, solar halo in the forenoon. It was complex, and consisted of an irised circle, very bright above and below, with a fainter elliptical arc, exterior to the circle, and moderately bright; slightly irised, and visible throughout by indirect vision. The space between the circle and the ellipse was very bright. There were two small, faint but distinct and slightly irised parhelia in the external ellipse. The halo lasted from 9 till about 12 o'clock. About 1½ o'clock it reappeared with the omission of the parhelia, and the addition of a colored arc, having its convex side towards the sun. The red in this arc was on the side towards the sun; by 3 o'clock but a slight trace of a halo.

Oct. 1. Aurora behind clouds, very early in morning; halo from 10 till 2 o'clock; faint aurora in the evening; bright meteor at 7 o'clock 25 m, above Ursa Major. It descended towards the right.

2, Very distinct solar halo in A. M.; 6th, lunar halo at 4 A. M.; 14th, solar halo in P. M.; Aurora from midnight till morning. The evening of the 13th, was cloudy. At 12½ o'clock a low steady light without an arch, and with a few faint streamers was observed. At 3 o'clock a perfect arch was observed, the lower border of which was about 2° below γ, of Ursa Major. No streamers were observed at this time; the aurora continued till morning. Late in the evening of the 14th, a faint aurora was noticed above a bank of clouds in the north. By 10 o'clock a high arch with a band of light still higher was observed. At 2 o'clock 45 m., the whole northern sky was filled with masses of light, without any trace of an arch, and with a few broad streamers. During a few minutes four meteors were observed. One had been seen the evening previous. The aurora was afterwards obscured by clouds, but at 4 o'clock the sky was perfectly serene, and an arch perfect on its western extremity, and two degrees below *Vega* had formed. The arch did not form to the east. The upper part of the arch was surmounted by broad flashes of light, like the faint lightning of a summer evening. Between 4 o'clock and daylight formed and dissolved repeatedly, attended with numerous short streamers. At morning the sky was overspread with scattered patches of clouds, which became intensely red at sunrise. A column of light projected upon the clouds preceding the rising sun, and continued for an hour afterwards; it was red before, and white after sunrise. 15th, Solar halo nearly all day. 16th, Halo in P. M. 17th. A meteor at 8 o'clock 10 m., descended perpendicular to horizon a few minutes of a degree to the left of Algenib. 19th, Faint aurora late in evening. 21st, Solar halo all day. 23d, Thunder shower in south west; aurora behind clouds in evening, and very early the next morning. 25th, Indian summer, which lasted 4 days. 25th, Aurora at 3 o'clock A. M., arch 8° high and entire. 28th, Trace of a halo in A. M. 30th, First snow in the season, not enough to whiten the ground. Faint aurora without an arch, low in the north in evening; mostly obscured by clouds.

Novem. 1. Three meteors below Pegasus. 15th, Early in the morning an auroral arch about 4° high, very entire, with a few faint streamers, which were short and stationary; it lasted till daylight. 17th, Brilliant irised halo from 11 till 3 o'clock. 18th, Faint halo in A. M. 20th, Halo in forenoon, faint white. 24th, Halo in forenoon. 25th, Halo in forenoon, lunar halo in evening; faint aurora which continued till morning. 29th, First snow to whiten the ground; it commenced falling at daylight and continued through the day; depth at this place 12 inches, making good sleighing.

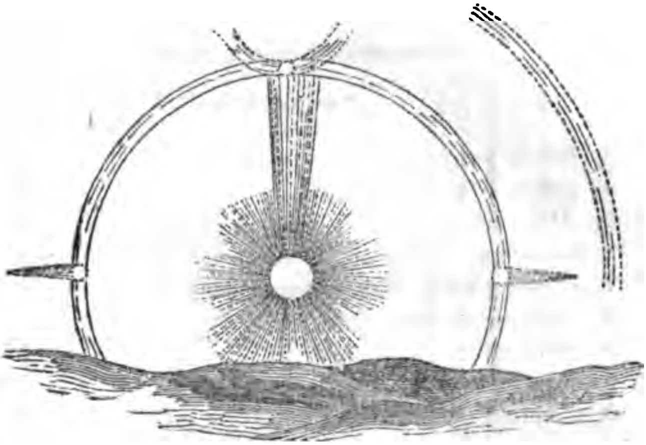
Decem. 2. Thermometer —8 at sunrise; solar halo in forenoon. 7th, A low well defined auroral arch with a very dark space below, seen from 8 o'clock till near morning; no streamers observed: the centre of the arch lay considerably east of north. 21st, Bright lunar halo. 26th, Solar halo in forenoon. 25th, Solar column observed over the sun shortly before sunset; lunar halo during a part of the evening. A faint aurora without an arch through the night. 31st, Faint aurora in the evening, late.

SUMMARY

Of Meteorological Observations, kept at Somerville, St. Lawrence county.

MONTHS.	THERMOMETER. (F.)								WINDS. (No. of days.)								Strength of wind No. of days.				Clearness sky No. of days.				Rain & sn. No. days.				
	Mean—sun rise.	Mean—9 A. M.	Mean—3 P. M.	Mean—9 P. M.	Mean—month.	Highest degree.	Lowest degree.	Range.	North.	North East.	East.	South East.	South.	South West.	West.	North West.	Very slight breeze.	Gentle breeze.	Fresh breeze.	Strong wind.	Entirely clear.	Entirely cloudy.	More than ½ clear.	More than ½ cloudy.	Rain.	Snow.	Gage.	Haloes.	Auroras.
May, ...	47.72	53.79	63.20	52.42	58.62	84	30	54	5½	4¾	2	1¼	3	4	5	5¾	14	11¼	5	¾	5	10½	5¼	10¼	11	..	1.59	3	..
June, ...	61.37	70.41	79 88	68,76	70.11	96	49	47	3¼	1	½	2	8½	7	5	3	19¾	8	2¼	..	9¾	6¼	8¼	5¼	7	..	1.40	6	3
July, ...	65.90	79.09	82 58	76.64	74.80	103	48	55	3½	1	¾	¾	8½	10¼	6	1	18	11	1	¾	9¼	4¼	13½	4	6	..	1.33	5	6
August, ...	63.07	71.25	83.11	71 93	72.39	96	50	46	1	1¼	1¼	2¼	4¾	7¼	2½	12¼	22½	5	1¾	1¼	6¾	10	8¼	6	6	..	2.26	5	5
September, ...	52.23	60.30	72.00	60.63	61.29	86	34	52	2	2¼	¼	1	6¼	8¼	2½	6¼	19	10½	¾	..	8½	13	4½	4½	10	..	2.67	6	7
October, ...	42.77	47.36	58.58	47.94	49.16	73	25	48	3¼	5¼	0	2½	6¾	6	2	5½	21	8	1	1	5	16¼	6	3¼	9	..	4.80	8	7
November, ...	40.93	43.96	52.80	44.03	45.48	76	24	52	6¼	4	1½	¼	7¼	5¼	4½	2¾	24½	3½	2	..	3¼	13¼	5¼	8¼	9	4	1.50	5	1
December, ...	18.61	21.06	26.35	21.93	21.99	41	—16	57	2½	3¾	1¼	2¼	3¾	5	7	6	23	5¼	2½	¼	1½	22¾	5	1¾	2	11	1.16	4	2
Total, ...	49.07	55.28	69.81	55.53	56.72	103	—16	119	27¼	23¾	7¾	12¼	48¼	53¼	34½	42½	161¾	62½	16¼	4	49	96¼	56	42¼	60	15	16.71	42	31

Figure and description of a remarkable solar halo and parhelia seen at Richland, Oswego county, March 6, 1847. By Franklin B. Hough, M.D.



The day had been hazy and rather warm. The two parheliæ on the sides were first observed, which slowly extending, formed the entire upper arc of a halo. That on the north side of the sun was much the brightest, and both were brilliantly colored. At length there appeared a parhelion on the upper point of the arc, which was also very finely irised and extended up in a curve very much like a parabola or hyperbola. At least it was not the arc of a circle. Lastly there was seen on the north side of the sun an arc so indistinct as to be perceptible only by indirect vision. Like all the others it was irised, the red being towards the sun, but its most conspicuous color was *violet.*

During the whole time an indistinct beam of white light was observed passing vertically through the sun.

So brilliant were the two parhelia that they attracted very general observation and remark.

The following day was stormy, and a driving rain and sleet from the west made the day very uncomfortable.

IV. Floral Record kept at Somerville, St. Lawrence County, during the years 1848–1849.

By Franklin B. Hough, M. D.

Flowers first seen.		Names of Plants.
1849.		
April 1,		Betula papyracea.
1,		Betula populifolia.
6,		Alnus serulata.
6,		Cerastium media.
7,		Chrysosplenum Americanum.
9,		Salix myricoides.
9,		Salix tristis.
9,		Populus grandidentata.
9,		Carpinus Americana.
11,		Hepatica triloba.
15,		Betula excelsa.
19,		Epigea repens.
20,		Sanguinaria Canadensis.
21,		Acer rubrum.
21,		Claytonia virginica.
21,		Dicentra cucularia.
21,		Populus tremuloides.
21,		Populus balsamifera.
24,		Viola blanda.
27,		Ulmus Americana.
28,		Ulmus fulva.
1849.	1848.	
May 3,	May 1,	Xylosteum ciliatum.
1,	4,	Erythronium Americanum.
1,	4,	Leontice thalictroides.
1,	4,	Carex anceps.
3,	6,	Andromeda calyculata.
3,		Salix vitellina.
6,	3,	Viola rostrata.
17,	4,	Thlaspi arvense.
9,	4,	Taraxicum dens-leonis.

Flowers first seen.		Names of Plants.
1849.	1848.	
May	4,	Acer rubrum.
18,	4,	Acer saccharinum.
	4,	Ostrya virginica.
11,	4,	Waldsteinia fragaroides.
6,	4,	Viola rotundifolia.
11,	4,	Viola cuculata.
21,	4,	Ranunculus abortivus.
10,	5,	Ribes rubrum.
11,	5,	Mitella diphylla.
19,	5,	Viola canadensis.
6,	5,	Carex pennsylvanica.
18,	6,	Fragaria canadensis.
6,	14,	Dirca pallustris.
6,	7,	Trillium erectum.
6,	15,	Saxifraga virginiensis.
6,		Cerastium viscosum.
26,	6,	Veronica peregrina.
31,	6,	Fagus ferruginea.
18,	6,	Prunus domesticata.
13,	6,	Pyrus arbutifolia.
10,	7,	Caltha palustris.
26,	7,	Viola pubescens.
	7,	Arum triphyllum,
	7,	Coptis trifolia.
1,	7,	Trillium grandiflorum.
9,	7,	Uvularia sessilifolia.
9,	7,	Uvularia grandiflora.
20,	7,	Asarum canadense.
24,	7,	Rubus triflorus.
21,	7,	Ribes grossularia.
28,	7,	Phlox divaricata.
June 6,	May 8,	Viburnum lantanoides.
May 18,	9,	Tiarella cordifolia.
22,	9,	Rumex acetosella.
9,		Corylus Americanus.
9,		Luzula Pilosa.
9,	15,	Thalictrum dioicum.
21,	9,	Veronica Serpylifolia.
21,	9,	Cerasus pennsylvanica.
	9,	Viburnum pubescens.
28,	9,	Antennaria plantaginifolia.

Flowers to be seen.		Names of Plants.
1849.	1848.	
May 11,	May 10,	Panax trifolium.
13,	10,	Trillium erythrocarpum.
13,	11,	Dentaria diphylla.
	11,	Comptonia asplenifolia.
	14,	Corydalis glauca.
12,	25,	Hedyotis caerulea.
12,	23,	Ranunculus recurvatus.
13,	18,	Ranunculus acris.
16,	19,	Vinca minor.
22,	15,	Ribes lacustre.
28,	15,	Pyrus malus.
28,	15,	Juglans cinerea.
June 6,	May 15,	Cardamine hirsuta.
May 24,	16,	Rubus strigosus.
June 6,	May 19,	Cerasus serotina.
May 28,	19,	Syringa vulgaris.
June 9,	May 20,	Anthoxanthum odoratum.
May 28,	20,	Actaea alba.
26,	20,	Actaea rubra.
20,	25,	Fraxinus americana.
22,		Sambucus pubens.
June 2,	May 22,	Triosteum perfoliatum.
6,	22,	Crategus punctata.
May 26,	22,	Nepeta glechoma.
June 6,	23,	Cerasus virginiana.
May 21,	23,	Ribes floridum.
31,	23,	Rheum rhaponticum.
June 8,	24,	Geranium robertianum
	25,	Myosotis arvensis.
June 2,	25,	Galium aparine.
	25,	Hydrophyllum virginicum.
10,	25,	Trientalis americana.
6,	25,	Anemone pennsylvanica.
6,	25,	Pedicularis canadensis.
May 28,	25,	Acer striatum.
June 14,	25,	Acer spicatum.
	25,	Taxus canadensis
May 27,	25,	Aralia medicaulis.
June 14,	26,	Stellaria longifolia.
2,	27,	Convallaria bifolia.
2,	28,	Aquilegia canadensis.

Flowers first seen.		Names of Plants.
1849	1848.	
June 7,	May 29,	Sinapis nigra.
12,	29,	Trifolium pratense.
15,	29,	Viburnum opulus.
2,	29,	Cynoglossum officinale.
6,	29,	Crategus Coccinea.
2,	29,	Secale cerale.
15,	29,	Malva rotundifolia.
5,	30,	Trifolium repens.
14,	30,	Veronica anagallis.
	30,	Lonicera parviflora.
1,	30,	Iris versicolor.
6,	30,	Viburnum lentago.
May 28,	30,	Smilacina racemosa.
June 2,	31,	Galium trifidum.
	31,	Carya amara.
22,	31,	Asparagus officinalis.
	June 1,	Xanthoxylum americanum.
May 28,		Smilacina stellata.
June 2,		Cryptotaenia canadensis.
2,		Ranunculus fasicularis.
	2,	Staphylea trifoliata.
	2,	Podophyllum peltatum.
14,	2,	Eriphoron polystachon.
12,	3,	Cypripedium acaule.
16,	3,	Rosa cinnamoneum.
July 5,	3,	Ampelopsis quinquefolia,
July 9,	June 24,	Asclepias incarnata.
June 25,	25,	Ligusticum levisticum.
27,	25,	Malva muschata.
	25,	Oxalis ascetosella.
28,	25,	Maruta cotula.
29,	25,	Verbascum thapsus,
30,	25,	Nepeta cataria.
July 3,	25,	Hypericum perforatum.
4,	25,	Asclepias cornuta.
June 28,	25,	Verbena hastata.
July 4,	25,	Urtica dioicia.
	25,	Bromus secalinus.
9,	25,	Chenopodium album.
9,	25,	Plantago major.
June 22,		Symphitum officinale.
22,		Osmorhiza longistylis.

Flowers first seen.		Names of Plants.
1849.	1848.	
	June 25,	Rosa Alba.
	26,	Ranunculas multifidus.
July 6,	26,	Rubus odoratus.
8,	26,	Solanum tuberosum.
16,	26,	Conium maculatum.
4,	26,	Cicuta maculata.
	26,	Panax quinquefolia.
June 28,	26,	Sisymbrium officinale.
July 9,	26,	Convolvulus repens.
5,	26,	Rhus typhina.
June 29,	26,	Cnicus arvensis.
July 4,	26,	Hordeum hexastachon.
June 26,	July 4,	Blitum capitatum.
26,	June 26,	Triticum repens.
26,	27,	Pycnanthemum incanum.
	26,	Coriandrum sativum.
29,	26,	Cithago arvensis.
	26,	Calendula officinalis.
July 9,	26,	Alisma plantago.
June 29,	27,	Aralia hispida.
27,	27,	Potamogeton hybridus.
	27,	Geum strictum.
July 6,	27,	Echinospermum lappula.
9,	27,	Campanula rotundifolia.
8,	29,	Linaria vulgaris.
6,	29,	Circaea lutetiana.
June 27,	July 5,	Polygonum fagopyrum.
27,		" scandens.
29,	7,	Pyrola secunda.
30,		Eupatorium purpureum.
July 5,	June 28,	Ranunculus fascicularis.
23,	30,	Sonchus oleraceus.
Aug. 12,	30,	Datura Stramonium.
July 30,	30,	Polygonum persicaria.
20,	July 2,	Verbena urticifolia.
12,	2,	Althea rosea,
1,	14,	Potentilla argentea.
4,	14,	Eupatorium perfoliatum.
20,	4,	Melilotus leucantha.
9,	5,	Monarda didyma.
13,	5,	Zea mays.

Flowers first seen.		Names of Plants.
1849.	1848.	
July 20,	July 5,	Souchus arvensis.
20,	6,	Portulacca oleracea.
27,	6,	Campanula americana.
5,	Aug. 10,	Brasenia peltata.
5,	July 12,	Apocynum canabinum.
5,	Aug. 2,	Lappa Major.
5,	July 20,	Cnicus lanceolatus.
8,	7,	Sagittaria sagittifolia.
	6,	Lysimachia thyrsiflora.
	6,	" stricta.
	6,	Monotropa uniflora.
13,	7,	Ambrosia trifida.
13,	7,	Panicum glaucum.
9,	7,	Avena sativa.
	7,	Chimaphilla umbellata.
	7,	Pyrola elliptica.
	7,	" rotundifolia.
26,	7,	Typha latifolia.
	7,	Cypripedium spectabile.
9,		Apocynum androsemifolium.
9,		Hibiscus trionum.
9,		Nymphaea odorata.
9,	13,	Gnaphalium uliginosum.
9,	31.	Erysimum chieranthoides.
12,		Melampyrum americanum.
15,	12,	Inula helenium.
17,	25,	Galeopsis tetrahit.
17,	13,	Gnaphalium margarataceum.
18,	24,	Echinospermum americanum.
27,	12,	Lobelia inflata.
June 8,	June 3,	Polygonatum multiflorum.
16,	3,	Oxalis stricta.
26,	3,	Prunella vulgaris.
2,		Hydrocotyle Americana.
5,	17,	Rumex angustifolia.
18,	5,	Moehringia lateriflora.
5,		Menyanthes trifoliata.
6,	6,	Erigeron strigosum.
6,		Senecio aureus.
6,		Zizia aurea.
6,		Viola Muhlenbergii.

Flowers first seen.		Names of Plants
1849.	1848.	
June 6,	June 7,	Cornus sericea.
6,		Acorus calamus.
6,		Arabis lyrata.
6,		Cardamine rhomboidea.
7,	June 3,	Cochlearia armorica.
	6,	Polygonum Scandens.
8,	7,	Rhus toxicodendron.
15,	7,	Viburnum acerifolium.
14,	7,	Nuphar advena.
14,	8,	Barbarea vulgaris.
8,	22,	Sanicula marylandica.
8,		Smilacina trifolia.
8,	10,	Potamogeton natans.
8,		Medeola virginica.
8,		Galium asprellum.
8,		Celastrus scandens.
27,	9,	Sparganum ramosum.
	10,	Potamogeton perfoliata.
	10,	" zosterafolia.
14,	10,	Lemna minor.
10,	1,	Rubus villosa.
10,		" occidentalis.
11,		Cornus canadensis.
22,	11,	Phleum pratense.
22,	13,	Dianthus caryophyllus.
13,	15,	Potentilla canadensis.
13,	July 14,	" norwegica.
13,		Achillea millefolium.
13,		Juncus acutus.
13,		" setacea.
13,		Lithospermum arvense.
14,		Scirpus lacustris.
14,		" debilis.
14,		Juncus filiformis.
14,		Draba arabiscens.
July 3,	June 14,	Lonicera hirsuta.
	14,	Pentstemon pubescens.
June 6,	14,	Diervilla trifida.
	14,	Linnæa borealis.
18,	14,	Arenaria stricta.
26,	15,	Pastinaca sativa.
14,	26,	Heraclium lanatum,

Flowers first seen. 1849.	1848.	Names of Plants.
June 15,	June 17,	Lencanthemum vulgare.
15,	29,	Polygonum aviculare.
15,	22,	Nuphar lutea.
15,	24,	Cornus circinata.
15,	27,	Scirpus atrovirens.
16,		Juncas effusus.
27,	14,	Sympharocarpus racemosus.
16,	17,	Rumex acetosa.
16,	17,	" crispus.
17,	18,	Pisum sativum.
18,	25,	Rosa gallica.
	17,	Mitchella repens,
29,	17,	Ceanothus americanus.
22,	19,	Sinapis arvenais.
27,	19,	Leonurus cardica.
27,	19,	Dianthus barbata.
29,	22,	Epilobium angustifolium.
20,	22,	" palustre,
27,	22,	Geum virginianum.
July 9,	22,	Lysimachia ciliata.
June 26,	23,	Sambucus canadensis.
July 6,	24,	Mimulus ringens.
4,	24,	Gratiola virginica.
Aug. 6,	July 12,	Spiraea salicifolia.
July 20,	12,	Tilia Glabra.
28,	13,	Stachys aspera.
Aug. 22,	13,	Gnaphalium polycephalum.
9,	13,	Cannabis sativa.
9,	13,	Pastinaca sativa.
10,	14,	Boehemeria cylindrica.
July 20,	14,	Polymnia canadensis.
20,	14,	Solidago canadensis.
21,	15,	Hypericum canadense.
21,	15,	Humulus lupulus.
28,	15,	Agrimonia eupatoria.
Aug. 1,	16,	Sium latifolium.
July 31,	16,	Impatiens flava.
	16,	Hypericum corymbosum.
	18,	Urtica canadensis.
Aug. 12	19,	Desmodium dillænii.
3,	19,	Hypericum pyramidatum.

Flowers to be seen.		Names of Plants.
1849.	1848.	
7,	19,	Hieracium Gronovii
July 31,	20,	Helianthus annuus.
	21,	Borago officinalis.
Aug. 3,	21,	Spiraea tomentosa.
	21,	Artemesia absynthium.
	21,	Artemesia arbotanum.
July 28,	21,	Eriphoron alpinum.
20,	29,	Spiraea ulmaria.
20,	Aug. 1,	Pontederia cordata.
20,		Asclepias quadrifolia.
20,		Aralia racemosa.
21,	July 21,	Satureja hortensis.
24,	21,	Penthorum sedoides.
27,	24,	Carthamus tinctorius.
27,	Aug. 1,	Tanacetum vulgare.
27,	July 8,	Mentha borealis.
30,		Helenium autumnale.
30,	Aug. 7,	Clematis virginana.
31,	7,	Impatiens fulva.
Aug. 10,		Chelone glabra.
11,	11,	Cephalanthus occidentalis.
11,	July 25,	Rudbeckia laciniata.
12,		Phytolacca decandra.
12,	Aug. 1,	Lycopus Europeus.
12,	July 23,	Scutellaria lateriflora.
12,		Dipsacus sylvestris.
12,		Saponaria officinalis.
12,	24,	Platanthera psycodes.
12,	31,	Eupatorium aegratoides.
13,	July 23,	Lobelia cardinalis.
14,	Aug. 16,	Panicum capillare.
15,		Mentha piperita.
17,	16,	Bidens frondosa.
22,	July 24,	Scutellaria galericulata.
23,		Mentha viridis.
	July 21,	Sanicula marylandica.
	24,	Blephylla hirsuta.
	Aug. 7,	Heliopsis levis.
	10,	Polygonum sagitatum.
	10,	Clodea virginica.
	12,	Abutillon avicenna.

Flowers first seen.		Names of Plants.
1849.	1848.	
	July 13,	Cuscuta americana.
	13,	Aster prenenthoides.
	13,	Monotropa lanuginosa.
	13,	Goodyera pubescens.
	13,	Polygonum dumetorum.
	13,	Nardosmia palmata.
	13,	Cichorium intybis.
	16,	Apios tuberosa.
Sept. 8,		Gentiana andrewsii.
8,		Gentiana quinqueflora.
8,		Parnassia caroliniana.
22,	Sept. 15,	Helianthus tuberosa.

V. METEOROLOGICAL OBSERVATIONS, MADE IN CONNECTICUT FOR THE YEAR 1849.

(By J. L. HENDRICK.)

MONTHS.	Mean Temperature.	Highest degree	Lowest degree.	Range.	Prevailing wind	Rain, days.	Snow, days.	Fair, days.	Cloudy, days.	Foggy, Days.	REMARKS.
January, ...	21.70	50	— 8	58	W	4	0	19.5	11.5	2	Sleighing generally good. (Snow in December.
February, ...	20.66	45	—16	61	E&N W	0	8	14	14	3	" " Cold storm 12th.
March, ...	35.31	59	10	49	N W	10	4	13	18	7	" not very good, snow mainly gone 29th.
April, ...	41.21	63	19	44	N W	3	1	21	9	3	Snow on 19th, 5 or 6 inches.
May, ...	52.41	82	34	48	E	12	0	12.5	18.5	3	Fields begin to look green, 4th.
June, ...	64.31	94	40	54	N W	7	0	20.5	9.5	2	N. B. Fog generally morn, sometimes all day, *at pas.*
July, ...	67.67	92	42	50	N W & S W	8	0	24	7	4	(Warmest months July and August. Coldest February.
August, ...	67.34	90	50	40	N W	12	0	18	13	10	
September, ...	58.41	82	36	46	N W & W	8	0	21	9	4	Very little frost on dead grass, 3d.
October, ...	48.32	72	27	45	N W	10	0	11.5	19.5	3	Hard, killing frost on the 9th.
November, ...	45.46	66	20	46	W	10	1	14	16	7	Snow 28th, seen about 6 miles E. on the 16th.
December, ...	27.23	48	— 1	49	N W	6	5	14	17	3	Very good sleighing 4 - 9, and 23 - 31.
Of the year, ..	45.92	94	—16	110	N W	90	19	203	162	50	

These Observations were taken at Warren-Centre, on the mountains of Western Connecticut, until October 25th, (inclusive,) the remainder were taken at Litchfield, on 2d Hill, Connecticut.

1. *Progress of Vegetation.*

Epigea repens in bloom.—April 12.

Anemone Virginiana in bloom.—April 29.

Sanguinaria Canadensis and Caltha Palustris in bloom.—April 30.

Hepatica Americana and Houstonia Cerulea in bloom.—May 1.

Fields first look green.—May 5.

Aronia Botryapium in bloom.—May 12.

Fragaria Virg. in bloom.—May 14.

Ribes Rubrum (red currant) in bloom.—May 15.

Amygdalus Persica (peach) in bloom.—May 18.

Prunus Domestica (plum) in bloom.—May 19.

„ Cerasus (cherry) in bloom.—May 21.

Pyrus Communis, &c. (pear) in bloom.—May 25.

„ Malus (apple) in bloom.—May 28.

June 3. Fruit trees not yet out of blossom. Leaves of forest trees very small. Corn and potatoes just coming up. Some gardens not yet planted.

Leaves of Plat. Occid. (syc. button-wood) on dry ground, just opening.—June 8.

First ripe strawberries.—June 23.

Haying commenced.—June 26.

Currants begin to ripen.—July 6. Cherries do.

Red Raspberries (wild) ripe.—July 9.

Black Raspberries (wild) begin to ripen.—July 16.

Castanea Vesca (chestnut) in bloom.—July 18.

Rye harvest commenced.—July 22. Green peas.—July 22.

Green Beans.—July 25.

Silk begins to appear on corn.—July 26.

Rye harvest finished.—July 28.

Corn begins to blossom.—July 30.

Young Potatoes (small).—August 3.

First Green Corn.—August 19.

Corn but slightly glazed.—Sept. 5; appears stationary. Both Corn and Potatoes green and thrifty.—Sept. 9.

Alder in bloom.—April 4.

Ploughing commenced.—April 9.

Haying not finished till late in September.

2. *Birds, Reptiles, &c.*

Robins and Blue Birds first seen.—March 13.

Larks heard.—March 16. Black Birds seen.—March 21.

Frogs heard.—March 31. White Robin seen; head dark grey or lead color; body bluish white.

Swallows seen —April 25. Bobolinks seen.—May 13.

Night Jar (Caprimulgus) and Whip-poor-will heard.—March 20.

Caty-dids heard.—August 10. Locusts heard.—August 15 and 22.

Wild Geese (2 flocks) seen going south.—Oct. 13.

Crows in a flock; Larks do.—Oct 13.

Robins seen —Nov. 5. Larks.—Nov. 11. Snow Birds (brown and white) Dec. 12.

Two Larks seen.—Dec. 27.

Auroræ Boreales.—Auroral Clouds.

February 16. Not remarkable. A. light, February 19.

March 18. A. b. rain, 20, 21; also on 17.

June 26. A. clouds. When first observed (10 o'clock night) they appeared luminous and arched in the N, more expanded in the NW, whence arose a belt that passed over the pole star, and extended nearly across the heavens. With the base still resting in the NW, it passed the zenith, and extended in a somewhat broken line across to the S E. and after a short time disappeared. Others of less extent succeeded, all radiating from the NW. Wind NW, rather brisk. A beautiful sparkling meteor crossed the western sky from S to N.

June 27. A. clouds radiate in stripes, or belts, from NW, and converge to a point in the SE. Rain 28 and 29, also on 24.

Sept 3. Two or three A. clouds crossed the heavens obliquely, very beautiful.

Sept. 16. Auroral light. 18. Aurora Borealis luminous in the N; one perpendicular column arose in the NNW to an elevation of about 45°, moved slowly to the NW, and all disappeared. Appeared again about 11 o'clock; beautiful, red N, yellow NE.

Haloes.

Day.	Kind.	Same day.	1st day aft'd	2d day aft'd.	3d day aft'd.
January 31,	Lunar.	Fair.	Sleet.	Snow.	Fair.
February 2,	"	Snow.	Fair.	Fair.	Sn.
6,	Solar A. M.	"	"	F. & C.	F.
20,	"	F. & C.	"	Cloudy.	"
21,	"	C.	"	F.	"
24,	"	F.	Sn.	C.	C.
March 14,	"	C.	Rain.	F.	F. & C.
20,	"	R.	"	"	F.
23, 24,	"	F.	"	Sn.	S.
April 3,	Lunar.	"	C.	C. & F.	F.
7,	"	"	"	"	R.
25, 26,	Solar.	"	Fair.	R.	F.
May 1,	Lunar.	"	"	F. & C.	F. & O.
11,	Solar.	C. & F.	"	Rain.	R.
21, 22,	"	F. & C.	"	"	"
July 4,	So. and Lun.	F.	"	F.	"
25,	Sol.	"	R.	"	F.
August 8,	Sol. Lun.	"	R.	"	R.
17,	Sol. beaut.	"	F.	"	F.
27,	Lun. twice.	"	F. & C.	R.	C. & F.
September 4,	Sol. beaut.	F. & C.	R.	R.	R.
15, 16,	"	"	F.	"	F.
24,	Lunar.	"	"	F. & C.	"
26,	Solar.	"	"	F.	C.
October 21,	Sol. beaut.	"	R.	F. & C.	"
November 17,	Solar.	F.	C.	R.	R.
29,	Sol. Lun.	"	F. & C.	F. & C.	F. & O.
December 1,	Lunar.	F. & O.	"	Sn., R.	C.
2,	Solar.	F. & C.	S. & R.	C.	S.
13,	Sol. beaut.	"	C.	F.	R.
15,	Solar.	F.	R.	"	F.
21,	Lunar.	"	Sn.	"	S.
28,	Sol. Lun.	F. & C.	S. & R.	"	F. & O.
30,	Solar.	F.	F. & C.	"	"

Remark.—In the above table the word "Fair" denotes the general character of the day on which the halo (solar) occurred, although at the time of its appearance the sky was in that hazy, or semi-cloudy condition that is necessary to the production of the halo.

Of the 38 haloes recorded above, 3 were followed by R. or S. on the same day; 13 by cloudiness; 15 by fair weather. 13 were followed by R. or S. on the next day; 7 by clouds; 13 by fair weather, &c. See remarks following "Meteors."

Rainbows.

July 2. 4 o'clock P. M., partial, resembling a portion of a colored auroral arch.

3. Two, primary complete, secondary incomplete.

9. 4½ o'clock P. M., formed chiefly on a clear sky, and caused by fine rain from a few thin clouds rising towards the zenith. 5 o'clock, another, very near and very beautiful.

26. Partial bow; 31, evening, another; September 17, do.

Zodiacal Light.

This interesting phenomena has occurred several times during the year, though generally very faint. A few of the most remarkable are the following: February 19 and 21; March 10, 11, 16, 18 and 19; December 14, morning, beautiful, at first taken for the morning twilight, soon found to be too early, too narrow, and too elevated; 15, evening.

Meteors.

June 25. Small. July 11th, sky very clear; galaxy very luminous; six (or more) small meteors shoot across the western sky in different directions. 10-10½ o'clock evening.

June 15. 1 Silver white, passed SE; 17th, one do.; 18th, 2 small, 19th, 2 do.; 28th beautiful sparkling meteor.

August 11. Galaxy unusually luminous; stars very bright; 2 meteors, small, different directions; 14th, 1 small, passed behind the clouds; 15th, 2 or 3 do., SW; 16th, 2 do.; 17th, 1 do. SW.

August 18. Splendid sparkling meteor exploded in S. W.

August 19. 9, (some of them very small), passed in every direction; 20th, 1 do.; 21st, 7 do; 22d, 2 do.; 24th, 8 do., various directions, and 1 bright, E., 2 west.

August 25. 2 small, passed N; 1 larger, NE; 1 SE; 1 SW; and 1 *rose* in the SW. I have observed that those that cross the upper sky are generally very small, move very swiftly, & only a short distance. Those that descend towards the horizon are commonly larger, move more slowly and over a greater space. The largest arc among those that pass horizontally at an elevation of 40° to 50°, leaving a trail after them 30° to 60° in length.

August 26. 2 beautiful meteors passed down the E. sky, and 6 small do. in various directions; 28th, 2 do.; N., 1 large do. N; 1 small, E; 30th, 1 bright, sparkling do., SE.

September 1. 2 small do.; 3d, 3 do.; 7th, 1 small, N.; 1 bright, S., 8th, 3 do., stars very bright and numerous; 9th, 2 beautifully crossed the zenith, E. to W.; 1 small do. S.; 10th, 6 small do.; 11th, 9 do. different directions, and one, large, crossed the western sky towards the N.

September 12. 5 small do.; 13th, 8 do., (some very small); 14th, 3 do., passed in various directions; 15th, 3 small do., diff. do.; 16th, 2 or 3 small meteors. These, and most of the small ones recorded in this catalogue, appeared, (as most others of this class do,) above an elevation of 40°. Hence, such generally escape observation. One beautiful meteor appeared in the S. and another W.

September 17. 4 small, and 2 larger meteors, in different directions.

September 18. 1 m. SW., exploded without apparent motion; 1 beautiful, NE, & 2 small do. E; 19th, 3 do., E.

September 20. 5 small. 3 larger, do.; 21st, 1 very small do.; 23d, 1 small do. S; 24th, 1 do. N; 25th, 1 do. NW; 2 do. E; 1, SE; 1 S; and 1 beautiful do. N, which at first moved slowly, increasing in size, (having a bright trail,) and suddenly disappeared as if submerged; 28th, 1 large, beautiful meteor S.

October 9. 3 small meteors; 18th, 1 beautiful meteor fell E, in the dusk of the evening; 20th, 1 small do.; 23d, 3 beautiful meteors chased each other from E, to SW, just before a shower.

Most of this month was cloudy.

November 3. One large meteor fell and exploded in the east.

November 13. One do. SE; 14th, one small do. SE; 15th, one beautiful do. SW; 16th, 6 small do. E; 17th, one do. E, morning; 21st, one small do. S; one bright do. N, and one S.

December 12. One beautiful meteor N; 21st, one do small.

Very little time was spent in watching for meteors, except during August and September. I have no doubt, however, that an equal number might be seen during every month in the year, provided the sky were clear.

Haloes, Meteors, &c., as Signs of Storms.

It is evident that haloes result from a certain state of the atmosphere, and are therefore to be regarded as an effect of what already exists, and an indication, not a cause of something that may follow. They generally precede changes, as well as indicate states of the weather; and the reason, perhaps, why they are not always followed by storms, is probably, 1st, because the state of the atmosphere is not everywhere the same; and 2d, that it is constantly changing its place. Hence, if a halo be seen on any given day, at a certain hour, in twelve hours afterwards, the portion of the atmosphere in which the halo was seen may be many hundred miles off; and the storm will depend upon the fact, whether the air that surrounds or takes the place of that in which the halo was seen, be in a similar, or in a different state. In the former case there will be a storm, in the latter, not; but the storm may be elsewhere.

In regard to meteors, less perhaps is known of them, both as to their nature and their cause. I have examined them with much care, but have learned nothing satisfactory concerning them. I have no doubt, however, of their existence at all hours of the day as well as of the night.

Some of them start into view with a little flash, like the lighting of a match, and after remaining apparently stationary for an instant, as if to acquire strength, shoot off in a horizontal direction, (their motion becoming slower near its termination,) leaving a long, bright trail after them ; or descend in a similar manner towards the earth. Others, commence a mere moving speck or point, and descend a short distance enlarging in size, and increasing in brightness as they descend, then suddenly become almost extinct, and immediately blaze out again more bright than before, and continue their descent, sometimes diminishing in size until they gradually disappear, or "burn out," or end in a noiseless explosion. Others, and especially some of those that appear in the upper sky, are so small and quick in their motion, that nothing can be observed, either of their origin or their end, a fine, lengthening, vanishing, thread of light being all that is seen of them. I think I have also sometimes seen a little bright light spring up suddenly, like the flashing of a few grains of gunpowder, or the lighting of a friction-match, and "burn out" without motion.

In regard to meteors indicating changes of wind, or weather, I cannot satisfy myself that they perform any such office. Perhaps they may be a little more numerous before, than after, a storm, or during the time of variable winds, although this is not certain.

Storms.

March	27.	Severe snow storm.
April	10.	Evening foggy, rain accompanied by thunder.
	18.	Night, snow 5 or 6 inches deep; morn of the 19th cold, clouds wintry.
May	4.	Distant shower; 5th, fields begin to look green.
	30.	9 o'clock night, thunder and lightning.
June	4.	P. M., shower; 22d, thunder distant, N.
July	8.	Wind NW, N, NE, SE, S, SW; showers at a distance.
	18.	Distant thunder in the NE.
	20.	5 o'clock, shower passed N; 6 o'clock, fine shower. P.M.
	21.	8 o'clock to 9 A. M., fine rain ; 3—4 o'clock P. M., heavy shower to the N; 5—6 P. M., passed over from W; heavy rain again in the evening, 7 o'clock to 8½.
	26.	Began to rain about 7 o'clock A. M., rain at intervals during the day; 5—6 o'clock P.M., shower.
	31.	Several showers during the day.

August 4. Wind W, SW, NE, E, W; shower accompanied by heavy thunder, lightning, &c., passed more to the N 5½—6½ o'clock P. M. The wind had been very vacillating during several days.

9. "Scuds" from SSE; moderate rain 1—4 o'clock P. M.; evening steady, continued rain; heavy and protracted during the latter part of the night, accompanied by thunder, &c., the first to affect the streams since early in the spring.

10. Wind very variable; morning "scuds;" A. M., rain with thunder; P. M., tremendous shower with thunder and lightning; several inches of water must have fallen since the 8th; streams had become very low, though the ground was not *very* dry, nor did vegetation suffer much. Evening—cloudy, still; frogs, crickets, &c., in full chorus.

12. Distant thunder. 13th. Evening, distant shower passed from SE to NW.

23. Wind very variable, rain, thunder once.

29. Wind, rain, thunder and lightning once, evening, "scuds."

31. Wind, rain; evening, great rain.

Sept. 22. Morning, fog; P. M., rain; heavy rain in the night accompanied by thunder and lightning.

Oct. 1. P. M., heavy rain. 7th. Cold NE storm.

23. Evening, heavy shower; a tremendous, black cloud like a stupendous wall arose from the NW and passed to the SE, stretching across the whole heavens, accompanied by a violent whirlwind, heavy thunder and sharp lightning. 29th. Severe storm.*

Nov. 8. Noon, very dense fog; evening, shower with thunder and lightning, rain all night. 9th. Night, heavy rain.

Dec. 3. Snow and sleet during the preceding night; light rain during the day, which froze on every thing on which it fell, covering all with a thick coat of ice; wind high, E and NE; branches of trees broken. 4th. Telegraphic wires broken.

The above record includes all the storms (that have been accompanied by thunder, &c., and a few others) that have occurred in this vicinity during the year.

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*This and the following were recorded at Litchfield.

Clouds.

April 25. A most beautiful exhibition of cirrus clouds, radiating or diverging from the west, and converging in the east; appeared in the morning, and again in the afternoon. Beautiful solar halo on the same day. Rain on the 28th.

June 22 and 23. A similar phenomenon in the west. Rain on the P. M. of the 24th.

June 27th. A similar phenomenon in stripes, or belts, NW to SE. Rain on the 28th.

June 30. Do. (clouds cirrus and cirro-stratus) ENE and SSW. Rain on the 2d day of July.

July 4. A bank of cirrus clouds lay across the eastern sky, NE to SE. A. M., wind E. P. M., solar halo. Evening, lunar halo. Rain on the 7th.

July 25. Morning foggy. Noon, eastern sky nearly covered with most beautiful intermixture of cirrus, cirro-cumulus, and cirro-stratus, clouds. 4 o'clock, P. M., splendid combination of do.; partial solar halo. 6 o'clock do.; clouds diverge, or radiate from N to S. Rain on 26th.

August 15. Morning, wind NW, rather brisk; sky clear, except a bank of fleecy, cumulus clouds in the NW, and a similar one in the SE. The many straggling fragments that attempt to pass the zenith become *absorbed* or *evaporated* before reaching an elevation of 40°.

Remark.—I had frequently noticed a similar phenomenon before, but never saw it so complete and extensive as in the present instance. It appears that the atmosphere, relieved of its usual supply of moisture by the late abundant rains, was rendered capable of an unusually rapid and copious absorption. Hence a cloud, coming from the cooler and shaded regions of the NW into the warmer region of the sun (it was about 7 o'clock, A. M.) was soon evaporated, or absorbed by the dry, warm atmosphere,

September 2. During a part of the day, a bank of light airy clouds lay in fine stripes or lines along the southern horizon, as when a thin film of cream is blown to one side of a pan of milk.

September 19th. P. M. Cirrus clouds in long regular lines or stripes, resembling combed flax, thinly cover the southern sky, all pointing toward the south, and converging towards, but not quite touching, a bank of regular cumulus clouds lying along the southern horizon. Rain on the 22d.

Sunset.

August 15. First fair evening for several days. Immediately after the sun had disappeared, the whole western sky was richly overcast with a beautiful blaze of soft yellow light, behind which the blue sky could in some places be faintly seen, giving the whole a most exquisitely softened and richly modified appearance. A shade of orange red, with which the whole was presently overcast in a somewhat radiating manner, increased the splendor of the scene, and a few small fragments of cloud, thinly and irregularly scattered along the horizon, added a pleasing variety to the truly sublime spectacle. Soon all passed away.

September 10. Sun set in an ocean of golden light.

Fruit.

Fruit in this part of the country very scarce, especially apples. Never have I known a year in which so few have been produced. Upon examining the record of the weather during the time of flowering, I find that it was cloudy during nearly the whole period, and much of it rainy; that the apple was in flower during a period of eight cloudy (four of them rainy) days; two or three of them foggy, with a prevailing east wind. During the flowering of the peach and the plum, fair, but rather cold wind, W and NW; of the cherry and the pear, a mixture of rainy, fair, and cloudy; wind variable.

Thermometer in Wells, Springs, &c.

MONTHS.		Spring.	Well.	Cellar.	Average.
February	23,	44*			35 Mean (of the day, re-
March	11,	44		36†	31 jecting fractions.
	16,			38	41
	28,	43			42
April	18,			39	39
May	1,	46		43	52
June	1,	47			64
	20,	49		59	72 92°.
July	13,	52			79 The past week 63° to
August	13,	53.5	50‡	62.5	68 Cellar nearly dry, and
September	18,	53	51	60	57 spring very low.
October	9,		51		44

* Situated in the corner of two slopes, or hills, one lying on the W, the other on the N, thus opening towards the NE; never dry, but often so low in midsummer, as to have no overflow. The decrease of temperature, March 28, was doubtless caused by the influx of the cold snow-water; the subsequent increase was evidently the effect of the summer heat upon the earth.

† Under a house, about fifteen rods (E) from the spring, and on nearly the same level, three or four feet deep, frozen over in midwinter, and nearly dry (empty) in midsummer. Changes effected by the influence of the sun upon the earth.

‡ About ten rods (NE) from the house, in a direction nearly opposite to the spring, in a more sandy soil, and on the south side of a house, fifteen or twenty feet deep. Change probably caused by the influence of the sun upon the earth.

Winds, Height, Currents, &c.

Winds in general appear to be confined to the lower strata of the atmosphere; *i. e.* the region beneath the clouds, extending but a comparatively small distance above, and possessing less velocity the higher we ascend. This appears from the fact that the clouds are never seen to move with the same velocity with the air (wind) below; that the first, or lower stratum of clouds generally moves faster than the next above, and so on; the higher often appearing entirely motionless. And, further; while a brisk, or even violent wind is blowing in one direction, the clouds above are often seen moving in another.

The phenomena of cross-currents appear to depend upon, and result from the shape of the country over which they pass. I have sometimes seen a strong south wind pass down a valley, while a *vane* on a church-steeple, about a hundred feet high, standing in the same valley, showed a strong W. wind. Upon examining the shape of the country, the phenomena were easily explained. In this place (Warren,) while the vane on the hill shows a strong W. wind, in the valley ten or fifteen rods north, the wind will be N. W. The shape of the country explains this also. Wind, (air,) like water, is a fluid, and though of less density and less specific gravity, is subject to the same laws.

Suppose a stream of water flowing south through a nearly level valley, having a terrace or gentle rise of a few feet on each side, and running nearly parallel with the general course of the stream, but varying somewhat from the course of a range of mountains that may be supposed to form an irregular barrier a little distance beyond the terrace. It is evident, that while the stream is low, the water will follow all the turnings and windings of its bed however numerous and various. But suppose the stream to be swollen so as to overflow its banks, and spread out to the terrace on each side. While the water below would follow the channel or bed of the stream, that above would present an even sheet moving forward without regard to the meanderings of the stream below. Should the water rise still higher, so as to overflow the terrace, the surface current would again be somewhat changed in direction, while those below would continue on in their former course. A similar explanation applies also to winds. Suppose in the above illustration, a west wind to pass over the country. This would be perceived only on the mouniains, and at the same elevation above the valleys; while in the main valley, the wind would be N. or S. according to the direction of the entrance, direction or termination of the valley;

while the different openings in the mountains would furnish examples of winds of different directions at the same time.

Botanical.

In the spring of 1849, I set out a thorn bush which blossomed and produced imperfect fruit ; on some of which I discovered what I have attempted to describe below, not having found it in my botany. Sporules (?) contained in small, oblong, cylindric, membranaceous, hymenia, imbedded in the pulp of the fruit, all pointing outward to the surface.

Peridia, (or hymenia,) opening on the surface of the fruit, (or substance in which they are imbedded.) Openings formed by the bursting of the peridia, (or hymenia,) and when newly formed resemble minute, membranaceous, sub-irregular corols ; sporules of a dark orange-yellow color ; copious. Found in the immature imperfect fruit of the crataegus punctata.

Object of Meteorological Observations.

Among the objects to be attained by Meteorological Observations, one doubtless is, from observations on birds, reptiles, &c., to learn the character (forwardness or backwardness,) of a season; from observations on vegetation, to learn the character of a climate, as well as that of a season, and from observations on Meteorological phenomena, to learn their influence, use, &c., in relation to states or changes of weather, &c. In regard to the first and second of these, a simple record of the *time of their appearance* is perhaps all that is necessary as a ground of comparison of one season with another; and the " Instructions of the Regents" on this subject, if carried out, seem amply sufficient. Of the " flowering of plants," however, I would suggest whether it should not be the " first appearance," rather than the " full bloom," that should be recorded, as the former could be determined with more accuracy and less difficulty than the latter. In regard to " Meteorological Phenomena," it appears to me that the present method of recording is very defective, as it generally embraces the simple facts without the attending circumstances. To derive the full advantage of such phenomena, we should have, as far as possible, what precedes, accompanies and follows. These should not only be given in the general record, but should also be systematically arranged in tables by the observer, who can do it better, i. e. with less labor or trouble, than any other person.

N. B. The thermometer used in making my observations, I have found to be incorrect. The error is greatest in winter, amounting to an average of about one degree too high. In summer it is less, being about one-half to three-fourths of a degree too high. Yearly average perhaps about seven-eights of a degree.

VI. LAKE ERIE, ITS FREEZING AND OPENING, &C., IN A LETTER FROM JAMES L. BARTON, OF BUFFALO, TO WILLIAM H. BOGART.

Albany, March 7, 1850.

WILLIAM H. BOGART, ESQ.

Dear Sir—I have just received your note. The circumstance of ice being seen so late in Lake Erie and the Niagara river which I mentioned to you, is not to be understood as a usual but a very unusual thing.

I arrived on the Niagara river at Lewiston on the 4th of June, 1807; at which time the ice was running in such quantities as to render the passing of the river very inconvenient. Nothing like it occurred again, until after a period of thirty years. On the 6th of June, 1837, I saw ice floating in small quantities in Buffalo bay. The navigation of the lake that year opened about the middle of May, which was a much later period than has happened for many years, before or since.

A radical change is working perceptibly in our western climate, for which various causes are assigned. We have not, now, the continuation of violent winds, the degree of cold and depth of snow, we had forty years ago.

The winds in the spring of the year are the most powerful agents in clearing the lake of ice and opening the navigation. Winds strong enough to put the water in violent agitation, without raising the water so as to cause the ice to pack in masses at the narrow end of the lake, wears it away faster than rain or warm weather.

I once travelled from Buffalo to Detroit by stage, left Buffalo on the 17th March, until I reached Cleveland, nearly two hundred miles, the lake appeared covered with ice, and the prospect of navigation very distant. Yet by favorable winds the whole was broken up and destroyed by the action of the water, so that the lake suddenly opened, and I returned in a steamboat from Detroit and arrived in Buffalo harbor on the 2d of April.

With respect,

Your ob't serv't,

J. L. BARTON.

VII. SELECTIONS AND REFERENCES TO RECENT WORKS AND PUBLICATIONS ON METEOROLOGY.

A. Aurora Borealis, June 8, 1846, seen by Sir Chas. Lyell.
B. The Telegraph.
C. An earthquake in Nicaragua, October 27, 1849.
D. Current of air in different directions at various altitudes.
E. References to recent publications on Meteorology.

A. *Aurora Borealis.*

1846, June 8. "At half-past nine o'clock, on the 8th of June, it being bright moonlight, some hours after we had lost sight of the ice, when we were in a latitude corresponding to the South of France, we saw in the north a most brilliant exhibition of the Aurora Borealis; the sky seemed to open and close, emitting for a short period silvery streams of light like comets' tails, and then a large space became overspread with a most delicate roseate hue. The occurrence of this phenomenon in the summer season, and in so southern a latitude, seemed to point to its connection with the ice which was drifting over the sea between us and Newfoundland, now to the NW of us. We learn from Sir James Ross' narrative of the late antarctic expedition, the highly interesting fact, that when the Aurora Borealis was playing over the great barrier of coast on the shore of the antarctic land, it partook distinctly of the irregular and broken shape of the icy cliffs over which it hovered." *Sir Charles Lyell's visit to the United States* (vol. ii., p. 274,) *on board the Britannia steamer, and his return voyage.*

B. *The Telegraph.*

"In a recent number of the *Athenæum*, we mentioned the arrangements that are in progress to insure a daily return of the prevailing winds over every portion of the island to which the railroads or electric telegraphs have been extended. The importance of this must be evident to every one who has made meteorology the subject of attention, as these returns may in all probability serve to establish the law of the progress of great ærial currents, and of the disturbing influence of peculiarities in the form of the earth's surface. M. Quetelet has communicated to the Royal Academy of Sciences of Belgium some particulars relative to the arrangements in England, and he states that a series of analogous observations are already being made at Brussels, Ghent, Louvain, St. Troud, Leige and Namur. We may hope that they will be extended to the extreme stations of Ostend, Antwerp and Verviers, and gradually be carried on over a much larger extent of the continent of Europe." *Athenæum, April* 21, 1849, p. 413.

The Telegraph.

"The telegraph now gives notice of storms! For example, the telegraph at Chicago and Toledo now gives notice to shipmasters at Cleveland and Buffalo, and also on Lake Ontario, of the approach of a north-west storm. The result is practically of great importance. A hurricane storm traverses the atmosphere at about the rate of a carrier pigeon, viz.: twenty miles an hour. Our northwest winds come apparently from the sources of the lakes, and sweeping over Lakes Superior, Michigan and Erie, spend themselves in the interior of the country. Our southwest winds come apparently from the Gulf of Mexico, where the force is very great, and pass up the general direction of the Mississippi and Ohio. Commencing at these remote points, it is obvious, that if telegraphic offices are established at the extremes of the line, notice of the approach of a violent wind may be given to distant ports from 12 to 20 hours before it will be felt there. The practical effect will be that a vessel in the port of New-York about to sail for New Orleans, may be telegraphed 20 hours in advance on the coast from the Gulf of Mexico. We are only on the threshold of the real substantial advantages which may be rendered by the electric telegraph. Already notices of storms on the lakes have been given from Chicago and Toledo to Buffalo." An extract from "*The Emigrant Churchman in Canada,*" published in London, August, 1849. *London newspaper, Atlas, August* 11, 1849, p. 505.

C. Earthquake in Nicaragua.

[From the National Intelligencer, February 14.]

Leon de Nicaragua, Dec. 26, 1849.

A press of business has prevented me from transmitting you my thermometrical and other observations for this point for the past three months; but I will endeavor, at an early day, to make an abstract of them for the use of the institution.

Residing in this volcanic region, you can readily comprehend that I have been, *per force*, much interested in the subject of earthquakes. I need not tell you that they are of frequent occurrence here, and probably that class of phenomena could no where be studied with greater advantage. I have experienced several, but with one exception they were very slight.

The exception here referred to occcurred on the 27th of October last, at about 1 o'clock in the morning. I was roused from sleep by a strong undulatory motion, which was sufficiently violent to move my bed several inches backward and forth on the rough paved floor, and to throw down books, and other articles, which had been placed on my table. The tiles of the roof were also rattled together violently, and the beams and rafters cracked like the timbers of a deeply-laden vessel in a heavy sea. The people all rushed from their houses in the greatest alarm, and commenced praying in loud tones. The domestic animals seemed to share the general consternation ; the horses struggled as if to loose themselves, and the dogs commenced a simultaneous barking. This undulatory motion lasted nearly a minute, steadily increasing in violence, until suddenly it changed into a rapid vibratory or horizontal motion, which rendered it difficult to stand upright. This lasted about thirty seconds and was followed as suddenly by a vertical movement, or series of shocks, such as one would experience at being rapidly let down a flight of steps ; then declined in violence, but nevertheless seemed to stop abruptly. The whole lasted about two minutes and can be compared to nothing except the rapid movement of a large and loaded railroad car over a bad track in which there are undulations, horizontal irregularities and breaks.

No considerable damage was done. Some old walls were thrown down, and in various places around the country I have observed that rocks were detached, and portions of cliffs broken off by the shocks. The thick adobe walls of my house were cracked in several places from top to bottom. Many other buildings suffered in like manner. The motion which seemed most dangerous to me was that which I have described as horizontal, in which the earth seemed to slide away from beneath my feet.

The night was clear moonlight, and it was very still ; not a breath of air seemed stirring. The orange trees in my court yard, during the continuance of the undulations, swayed to and fro, with a steady regular motion, but when the other motion followed, they had an unsteady or tremulous motion. The water in my well, which is very deep, seemed also much agitated. The direction of the undulations was from north to south,* and they were felt throughout the entire State of Nicaragua, and in Honduras, and San Salvador, and even perhaps beyond these limits.

I learn from old residents here, that as compared with the others which have occurred within the last quarter of a century, this earthquake ranked about 7, the maximum being 10.

All observers here concur in saying that, while earthquakes are common at all times of the year, they are much more numerous and violent at the entrance and close of the two seasons, the wet and the dry; that is, about the last of October and the first of November, and the last of April and the first of May. They are observed as particularly numerous and strong after the heavy rains, at the close of the wet season in October. It is observed that a general quiet seems to prevail, for a period, both before and after their occurrence.

It is difficult to discover the connexion between these different phenomena, but there seems to be a concurrence as to the facts here stated. It is certainly true that the only shocks which I have felt were in the periods indicated, and it is also certain that nearly all occur in the night. Perhaps, amidst the occupations and distractions of the day, the lesser ones pass unobserved.

I am, sir, your most obedient servant,

E. GEO. SQUIER.

Professor Joseph Henry, &c.

D. *Currents of Air in different directions at various Altitudes.*

Remarkable Phenomenon.—The Milwaukie Wisconsin is informed that the schooner Traveller, whilst on her passage from the Michigan side of the Lake, experienced a very singular phenomenon. Whilst not a breath of air stirred upon the waters, a breeze was blowing aloft so strong, that with her topsail set, she ran seven miles an hour. No breeze was discovered on deck, but by going fifteen feet up the rigging it was sensibly perceived, and above it was bending and twisting the topmast as in a severe gale.—*Roch. Magnet.*—(*Albany Evening Atlas, July* 19, 1849.)

E. *References to recent Works and Publications on Meteorology.*

The Physical Atlas, a Series of Maps and Notes, illustrative of the Geographical Distribution of Natural Phenomena. By Alex. Keith Johnston. Folio. Edinburgh. 1848.

(Based on the Physihalischer Atlas of Professor Berghaus, with the co-operation of Sir David Brewster, Professor Forbes, &c., &c. Divisions: Geology, Hydrography, Meteorology, Natural History.)

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*The direction of all which have occurred since I have been in the country have been from north to south.

The Meteorologica lseries consists of five maps, and represents the isothermal lines and lines of equal barometric pressure, in one map; the geographical distribution of hurricanes, typhoons and other actual disturbances, in a second ; the polarising structure of the atmosphere in a third; and in the fourth and fifth, the general distribution of rain over the whole world and its more special distribution over the surface of Europe.

A Manual of Scientific Enquiry, prepared for the use of her Majesty's Navy, and adapted for Travellers in general. Edited by Sir John F. W. Herschel, and published by authority of the Lords Commissioners of the Admiralty. 12mo. London. 1849.

Articles. Meteorology. By Sir John F. W. Herschel.
Atmospheric Waves, By W. E. Birt.

The Shoe and Canoe, or Pictures of Travel in the Canadas, illustrative of their Scenery and of Colonial Life. By John J. Bigsly, M. D., late Secretary of the Boundary Commission. 2 vols, 12mo. London. 1850.

I enter this for the purpose of copying the following items:

" As might have been expected from the greater heat of the summers of the Canadas and other meteorological conditions, thunder storms are violent and frequent. Col. Sabine, in his report on the Meteorological and Terrestrial Magnetism of Toronto, U. C., has noted many particulars respecting the thunder storms of that place during the years 1841-42.

From them it appears that in 1841 there were 22 of what we mean by thunders storms, and that of these ten were very violent. Sheet lightning also occurred five times alone.

In 1842 there were eighteen thunder storms, of which nine were very severe, besides sheet lightning once and two distant but audible thunder storms.

The following little table will show the monthly distribution of the storms.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1841	....	....	1	....	....	7	6	3	5	1	....	..
1842	1	1	3	1	2	1	3	3	3	1	....	..

I am not aware that there are any similar tables for Lower Canada or the United States.—(Vol. ii., p. 175.)

Erman's Travels in Siberia, 2 vols., 8vo., 1848.

Vol. 1. page 8. Willow in Flower in the North of Europe.
9. Appearance of the House Swallow (*Hirundo domestica*) at various places in the North of Europe.
64. Climate of St. Petersburgh.
238. Temperature of Wells.
243. Temperature below the surface of the ground.
393, 468. Aurora Borealis and the Magnet.
411, 2, Lunar haloes.
471. Cold weather after an Aurora.
474. Mean Temp. of Beresof and grains raised there.
Vol. 2. 289. An Earthquake at Irkutsk.
366, Depth to which the ground was frozen at Yakutsk.
368. Mean temperature and extremes at Yakutsk.
479. Growth of trees at a lower temperature than in Europe.

London, Edinburgh and Dublin Philosophical Magazine, 1849.

Vol. 34. page 182. Remarks on the Weather during the quarter ending Dec. 31, 1848. By James Glaisher.
216. Dr. Forster of Bruges, on Storms of Wind, following a Saturday's Moon, and on Meteors.
226. Professor Challis' Observations on the Aurora Borealis of November 17, 1848, made at the Cambridge Observatory.
271. On the Meteorology of England in the year 1847. By James Glaisher.
286. De La Rive on Diurnal Variations of the Magnet Needle and on Aurora Borealis.
305. On the Aurora Borealis of Nov. 17, 1848, as seen in Perthshire (Scotland.) By R. Smith.
308. Remarks on the difference in the Depth of Rain falling in the same localities at different altitudes in the Hilly districts of Lancanshire, Cheshire, &c. By John Fletcher Miller.
344. W. H. Barlow on the cause of the diurnal variations of the Magnetic Needle.
366. Remarks on the weather during the quarter ending March 31, 1849. By James Glaisher.

410. Remarkable Solar Haloes and Mock Suns seen (Feb. 12th and 13th, 1849,) at Bath. By Edward Joseph Lowe.

469. On some Meteorological Phenomena. By Prof. E. Wartmann—on mirages, blue rays, and solitary crepuscular Rays.

Vol. 35. 69. Rev. Charles F. Watkins' account of the Aurora Borealis of Nov. 17th, 1848. (Royal Society.)

70. John Fletcher Miller, on the Meteorology of the Lake District of Cumberland and Westmoreland. (Royal Society.)

71. John Slatter, of Oxford, on the Aurora Borealis of Feb. 22, 1849.

137. On the Weather during the quarter ending June 30, 1849. By James Glaisher.

151. On the reduction of the thermometrical observations made at the apartments of the Royal Society, from 1774 to 1781, and from 1787 to 1843. By James Glaisher. (Royal Society.)

161. On the production of Lightning by Rain. By William Radcliff Birt.

225. Notice of "Introduction to Meteorology. By David Purdie Thompson, M. D."

357. On Shooting Stars. By Sir J. W. Lubbock.

358. On the weather during the quarter ending Sep. 30, 1849. By James Glaisher.

392. Rain, the Cause of Lightning. By T. H. Dixon.

437. Remarkable Solar phenomena at Beeston, near Nottingham, Oct. 22, 1849. By Joseph Lowe.

446. On the cause of Aurora Borealis. By Augustus De La Rive.

524. E. J. Lowe on the Epochs of Falling Stars.

Dublin Magazine.

Vol. 34. page 497. Physical Geography. The Air.

Silliman's Journal, New Series, 1849.

Vol. 7. page 390. Dana on the Temperature of Oregon and California.

402. Shepherd, Report on Meteorites, November 1848.

Vol. 8. 35, 216. Norton on the diurnal variations in the declination of the Magnetic Needle.

286. On certain frozen leaves, (of the Box Plant.) By J. Gorgas.

288. On the Aneroid Barometers.
429. Shooting Stars of April 20 and August 10, 1849.

Comptes Rendus.

Vol. 28. page 89. Aurora Borealis of January 14, 1849. By M. Coulvier—Gravier.
136. Cas de Fulguration Multiple. Par M. Desormery.
301. Rozet on the formation of Clouds.
495. Daubree on the Temperature of Springs, in the Valley of the Rhine ; the Vosges chain and at Kaiserstuhl, in the Duchy of Baden.
521. Mesure de l' intensite des rafales de vent. Par M. Babinet.
571. Solar halo, observed at Geneva, April 19, 1849, by M. Plantamour.
605. Description of a halo, accompanied with paraselenes and a circumzenithal arc. By M. A. Bravais, (May 4, 1849, at Paris.)
606. Hail at Gaudaloupe on the 28th of February, 1849. The third time during the present century.
696. Note on Aqueouis Meteors. By M. Belli, Professor in the University of Pavia.
725. Meteorology of Iowa, Oregon, and other parts of North America.
743. On an earthquake at Brest, May 26, 1849.
Vol. 29. 179. 601. M. Coulvier-Gravier on shooting stars seen in Paris, in July and August, 1849.
269. Meteors and shooting stars, from a particular part in the heavens. The constellation of Pegasus observed by M. Bulard on the 12th, 13th, and 14th of August, at Midhurst.
281. On the quantity of rain that falls at different heights By M. C. C. Person. (The difference is greater in summer than in winter; and this, it is suggested, is owing to the greater evaporation of water in the summer).
305. Matteuci on the loss of electricity in air, more or less moist.
311. Description of a remarkable fall of hail, near Cherbourg. By M. Liais.
637. Extract of a letter from M. de Humboldt to M.

Arago, on the change of time in the appearance of the shooting stars.

638. Leras, on an earthquake at Brest, Nov. 19, 1849.
702. Coulvier Gravier and Sargey on the periodicity of shooting stars.
743. Bonpland. Meteorological Observations at San Borga, on the Uruguay, 1847–48.
746. Sedillot on the precise date of the appearance of the shooting stars in the year 902. (18th October).

Report of the Eighteenth Meeting of the British Association for the Advancement of Science. Held at Swansea, in Angust, 1848. 8*vo. London.* 1849.

Page 1. Professor Baden Powell's Catalogue of Observations of Luminous Meteors.
35. W. R. Birt Fifth Report on Atmospheric Waves.
84. Supplement to the Temperature Tables, printed in the Report of the British Association for 1847. By Professor H. W. Dove. Containing 84 Additional Stations.
85. Remarks of Professor Dove on his recently constructed maps of the Monthly Isothermal Lines of the Globe, and on some of the principal conclusions in regard to Climatology, deducible from them; with an introductory notice. By Col. Sabine.
97. Notice of further progress in Anemometrical Researches. By John Phillips, F.R.S.
99. Report on the Expediency of recommending the continuance of the Toronto Magnetical and Meteorological Observatory, until December, 1850.

Transactions of the Sections.

Page 1. Rev. Dr. H. Lloyd on the Mean Results of Observations.
4. Dr. Siljestrom on those variations of the force and direction of the Terrestrial Magnetism which seem to depend on the Aurora Bor[illegible]alis.
12. John Ball, on rendering the Electric Telegraph subservient to Meteorological Research.

13. Rev. Jno. Challis, Description of a new instrument for observing the apparent positions of meteors.
14. Mansfield Harrison on self-registering Thermometer.
16. Comparative Temperature Table, showing the daily average height of the thermometer at Jersey, Torquay, Hastings and London. By J. W. Childers.
17. Meteorological Observations in Egypt, Arabia and India. By J. D. Hooker, M. D.
22. Notices of Auroras observed at Swansea. By John Jenkins.
23. Table of Meteorological Phenomena observed at Swansea. By John Jenkins.
32. On Meteorological Observations continued at Alten in Finmark. By John Lee, LLD.
32. Observations on the Meteorological Observations for 1846 and 1847, for Alten in Lapland. By J. F. Cole.
34. Observations accompanying Wind and Current Charts of the North Atlantic. By Lieut. Maury, U. S. Navy.
36. Meteorological Observations at Heygate for 1847. By Thomas Rankin.
37. Note on Shooting Stars seen August 10, at Armagh. By Rev. Thomas Robinson, DD.
39. On the fall of Rain on the Table Land of Uttree Mullay, Travancore, during 1846, from observations made by General Cullen, resident in Travancore. By Lieut. Col. Sykes. (235 inches!!)
41. On atmospheric disturbances and on a remarkable storm at Bombay on the 6th of April, 1848. By Lieut Col. Sykes.

British and Foreign Medico-Chirurgical Review.

Vol. 4. (Review of Humboldt's Cosmos.

67. Shooting Stars.
70. Aurora Borealis.
82. Variations of Atmospheric Pressure.

Journal of the Franklin Institute of Pennsylvania, Third Series. Vol. 18.

Page 40. On the Diurnal Variations of the Magnetic Needle and the Aurora Borealis. By M. Augustus De La Rive. (Translated from the Annales De Chimie.)

Chambers Edinburgh Journal, New Series.

Vol. 11. page 341. Periodical Phenomena in the Vegetable Kingdom,
413. Curiosities of Meteorology.

Proceedings of the American Association for the advancement of Science. First Meeting Sept. 1848.

Page 34. Prof. J. H. Coffin, Report on the Winds of the Northern Hemisphere.
30. Peter A Browne on Meteorites.

Second Meeting, August, 1849.

2. On the Aurora Borealis, by Prof. Secchi.
124. On the moisture, ammonia and organic matter of the atmosphere, by Professor Horsford.
386. On an instrument for determining the variations and duration of winds. By Prof. James H. Coffin.

Philosophical Transactions of the Royal Society of London, for 1849. Part 1.

Page 61. On the spontaneous electrical currents observed on the wires of the Electric Telegraph. By W. H. Barlow.
73. On the meteorology of the Lake District of Cumberland and Westmoreland, including the results of experiments on the fall of rain at various heights above the earth's surface, up to 3,166 feet above the mean sea level. By John Fletcher Miller.

Edinburgh New Philosophical Journal.
(Conducted by Professor Jameson.)

Vol. 47. page 114. Charles Martins on Trees cleft by the direct action of electrical storms.
147, 225. William Sturgeon, Description of several extraordinary displays of the Aurora Borealis,

as observed at Prestwich (four miles from Manchester,) during the winter of 1848-49.

October 18, 1848.
October 27, 1848.
November 17, 1848.
November 21, 1848.
December 17, 1848.
January 4, 1849.
February 19, 1849.

182. Rev. John Fleming on a simple form of Rainguage.

193. M. Dove on the Movement of heat in Terrestrial Strata of different Geological Natures.

370. Fire Ball at Bombay, February 19, 1849. Seen also at Poonah and Surat.

371. Fall of a great mass of atmospheric Ice, immediately after a loud clap of thunder, August 6. 1849, at the farm of Baloullick in Scotland, "It was nearly 20 feet in circumference, beautifully crystallized, nearly all transparent, except a small portion which consisted of hail-stones of uncommon size, fixed together It was principally composed of small squares, diamond shaped, of from one to three inches in size, all firmly congealed together. No appearance whatever of either hail or snow was discernible in the surrounding district."

372. On the Dilatation of ice by increase of temperature, from trials made at the Observatory of Poulkowa.

Annales de L' Observatoire Royal De Bruxelles.

(Published at the Expense of the State, by the Director, M. Quetelet,) Vol. 6, 4to, Brussels, 1848.

This work contains elaborate tables on the climate of Belgium. Upwards of seventy pages are devoted to the consideration of the direction, intensity, duration and distinctive character of the winds, and the remainder of the volume, to tables of daily observations made in 1845, on all the various branches of Meteorology, and on the magnetism and temperature of the earth at various depths.

Memoires De L' Academie Royale de Sciences des Lettres et des Beaux arts de Belgique, Vol. 21. *4to. Brusels*, 1848.

Observations sur les phenomenes periodiques du Regne animal, et particulierement, sur les migrations des Oiseaux en Belgique de 1841 a 1846, Par Edm, De Selys-Longchamps, (with an appendix.)

Observations des Phenomenes Periodiques, 1, Meteorologie et Physique du Globe, pour 1847. By M. M. Quetelet; Crahay, Duprez; and Rocquemaurel, at various places in Belgium; By Mr. Jenyns, at Swaffham-Bulbeck, in Cambridgeshire, England, and Dr. Haebert at Munich. 2. Phenomenes periodiques naturels, by various societies and individuals for the same year, The whole edited by M. Quetelet.

Bulletin de L'Academie Royale des Sciences, &c., de Belgique. Vol. 15.

Page 341. On the State of Vegetation (flowering of plants) at Brussels, during February and March, 1848. By M. Quetelet.

442. Notices of Earthquakes occuring during 1847. By Alexis Perrey.

Silliman's Journal, new series, vol. 6, *pp.* 298. Annual Report of the Regents of the University made to the Legislature, March 22, 1848 (*March* 2, 1848). This valuable Report—the sixty-first annual—contains the usual statistics respecting the schools and colleges of the State of New York, together with various tables and observations in Meteorology, in its different departments. This latter subject receives so much attention, that the report has become a Journal of Meteorology for the State, of high importance, as well as a register of educational statistics.

Silliman's Journal, new series, vol. 8, *p.* 306. Sixty-second annual Report of the Regents of the University made to the Legislature, March 1, 1849. This report, besides its fund of information relating to education in New-York, contains, as heretofore, meteorological tables for the year, made throughout the State, and various observations on different atmospheric phenomena. There are also some pages devoted to topographical and other information relating to portions of the State and even to other states, a part of which are valuable and another part add nothing to the reputation of the report.

ERRATA.

Page 125, schedule 4, for 1848, read 1849.

Page 142, schedule 6, for 1848, read 1849.

Page 278, third line from the bottom, for *science*, read *system*.

Report of 1849.—Page 361, for *E. J. Lees*, read *E. J. Lowe*.

Correction.—Page 105, Le Roy Seminary, for *Miss*, read Mrs.

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